Textile World

Established 1863

With which are combined

TEXTILES and POSSELT'S TEXTILE JOURNAL

334 Fourth Ave., at 25th St. NEW YORK, MAY 7, 1927 VOL. LXXI, NO. 19

Exhibits Show Wool Research Scope

British Demonstration Enlightens Public and Other Scientists Regarding Cooperative Program—Data on Wools from Various Animals—New Manufacturing Methods—Test Lamps for Color Fastness—Historical Exhibit of Great Interest Shown in Illustrations

LONDON, ENGLAND.

(Special to TEXTILE WORLD)

EXHIBITS now being made in London illustrate the scientific and practical work carried out by the British Research Association of the Woolen and Worsted Industries. They are shown in the Science Museum, one of the group of large national museums at South Kensington with the ostensible purpose of assuring the public, Parliament and fellow scientists of the objective reality of the work done at the headquarters, Leeds. As was said by Lord Balfour at the opening ceremony, if the general standard of life is to be maintained, that can be done only by the more and more successful application of knowledge to a production of wealth in which the whole community has its share.

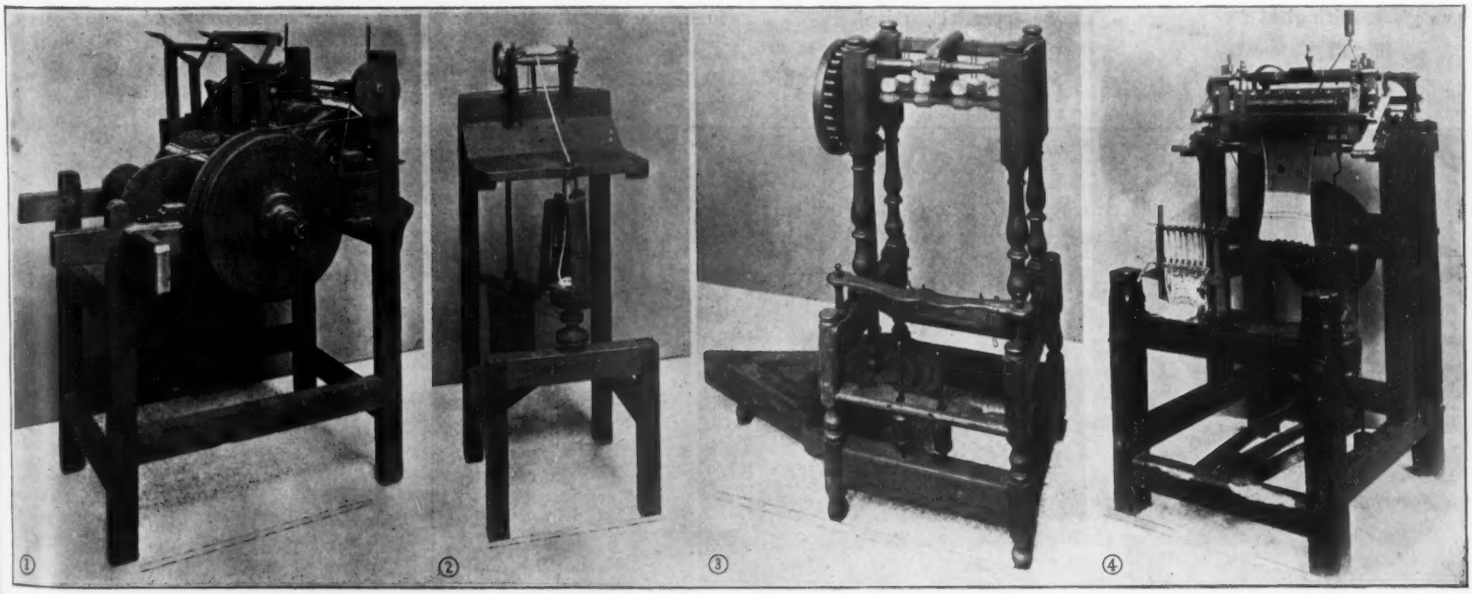
The exhibits occupy no large extent of space and a few of them are justifiable rather as necessary education for the public than as illustrations of the work done by the new generation of scientific workers. To this class belong several little demonstrations of facts about raw materials. An English-grown fleece is pinned to the wall of one show case and tapes leading from the several portions of the fleece are gummed to the window in front and labelled with the spinning number of the wool growing at the point. This is a window-dresser's way of emphasizing the variety of sorts grown on one animal. A large card with small samples attached illustrates the growth of wool. All the samples come from the shoulder of a mountain sheep, taken at intervals first of 5, 10 and 15 days, next of 3½, 6, 8, 11½, 30, 41 and 63 weeks. Another card illustrates from samples imperfections in raw wool including a "line of weakness" due to drouth, tippy wool, cotted wool and kempy wool. There are also samples to show the beautiful regularity of wool grown on pedigree merino sheep; scoured samples to show what is meant by "clear" and "burry"; photographs of typical pure-bred animals, maps demonstrating the geographical distribution of pure flocks and samples to display the inheritance of wool character in crossedbreeds of the first and second generations.

Quite in the same vein of general information is a group of typical cashmere, alpaca, mohair, vicuna, camel and rabbit wools extending down to hairs from the Samoyede dog. To this there is a counterpart in the fleece of a primitive Marco Polo sheep and in hairs or spines from animals as various as the porcupine, common hare and armadillo. Bottled specimens of wool grease with a list of its commercial uses, and of wool shoddy manure accompanied with microphotographs after six months of partial decomposition, are other objects with a purpose but no particular scientific bearings.

Achievement Illustrated

Definite achievement is illustrated by an exhibit of branding fluids, red, blue, green and yellow, fully removable by scouring, together with fleeces branded with coloring agents which cannot be scoured out. The practical application is shown in samples of cream cloth "brand damaged" by tar spots and by proof that these spots bleed and spoil successive layers of folded cloth in course of finishing. A piece of apparatus used in research is a fiber-scraper employed to

HISTORICAL EXHIBITS DISPLAYED BY BRITISH RESEARCH ASSOCIATION OF THE WOOLEN AND WORSTED INDUSTRIES



(1) ARKWRIGHT'S ORIGINAL CARDING MACHINE: Made about 1775 by Sir Richard Arkwright, this machine has been nearly 70 years in the Science Museum, South Kensington. It closely resembles the card invented in 1748 by Daniel Bourn. Cotton is hand-fed to the licker-in; the gear of the main cylinder is about 80 and that of the doffer about 8. The reciprocating stripping comb is James Hargreaves' invention.

(2) ARKWRIGHT'S ORIGINAL DRAWING FRAME: Called the "lantern" frame because of the shape of the sliver-can which is seen here with its door open. The front rollers have a draft of 3 to 1; the sliver is fed from behind and guided by an upright oscillating fork.

(3) ARKWRIGHT'S SPINNING MACHINE: A four-spindle wooden frame made in 1769 and used for warp twist only, showing the first successful application of the roller principle in cotton spinning. There are four pairs of rollers, the last pair geared 6.25 to the first. The flyer is fixed; the bobbin is driven by a worsted cord.

(4) AN OLD STOCKING FRAME: Made about 1770, typical of the machines generally in use until 1840, this marks little advance upon Lee's original invention of 1589. There is a horizontal row of bearded needles with a presser-bar, jacks and leads. It is left to the operator to feed in the yarn and depress the jacks. A few such machines are still employed to make expensive silk neckties in England.

remove the outer layer of the wool fiber and expose the inner surface in order that its changes may be studied and photographed under the influence of different liquids. Apparatus also for estimating the fineness of fibers by measuring the centimeters required to weigh one milligram, and an autographic system of recording the breaking strains of yarn and fibers belong to the same order of interest.

New Methods Shown

Processes are not shown in operation although there are specimen worsted spinning frames arranged for the new method whereby drawings are carried straight to the cap frame from the finisher-box, so cutting out the reducer and dandy rover. Coupled to one of the frames is the association's invention, the Stroboscope, for enabling variations of spindle-speed to be read easily. The effects of the worsted and woolen methods of manufacture are displayed in contrast by means of samples taken at the successive stages of manufacture up to the finished goods. Strips of slow-motion film exhibit details of carding and spinning operations. A roller setting gauge for use in carding engines, and an improved quadrant attachment, dispensing with the use of loose weights on the top of conditioning ovens are other items.

Testing Lamps

The Fugitometer, a formidable-looking testing lamp for colored fabrics, is not the only piece of apparatus in its line. There is an improved sunlight fading cabinet, a white painted hutch on four legs with a perforated zinc back, to equalize atmospheric conditions with the external air, and a window in the new glass which gives free passage to ultra-violet light. The defects of ordinary electric bulbs as illuminants in color-matching are strikingly shown. A single small case has strips of dyed cloth in its bottom and a lateral division in its middle. One-half is illuminated by a special "daylight" lamp, the other half by the usual bulb so that the discrepancy between the appearance of the colors is conspicuous. Cloth samples illustrate fading caused by 32 hours' sunlight in Ceylon and also the remarkably different fadings reached after exposure to sunlight as compared with changes due to the rays of the electric arc. Color fadings due to bacterial action and changes caused by the presence of iron salts are exhibited by sample.

Other Defects

Cloth faults of other kinds are illustrated, including specks in fancy woolens due to insufficient carding, streaks caused by defective spinning, patchy dyeing from faulty carbonization, oil stains, mildew stains and tight picks caused by weaving damp yarn in company with dry filling.

The point that wool yarn is stretchable when wet is emphasized in various ways. Weights are shown suspended from (1) dry, (2) wet worsted yarn and it is seen that the length of the latter is pulled out by some inches. There are cloth samples, from which nothing much can be seen, woven from yarn which has actually been extended 20% by a special wetting and stretching process. In course of the process the yarn is wound from cones on to a beam and the stretched yarn is steamed or boiled and then re-wound. The projecting fibers are naturally unaffected by the stretch but the claim is that by this method the count of yarn can be appreciably raised.

One of the most striking displays illustrates the migration of alkali, or that tendency which causes alkali absorbed in course of scouring to travel especially to the folds, selvages and tail-ends of pieces which are dried too slowly or allowed to lie about in a wet condition. Cloth samples are dyed with "indicator" dyes and where these meet the alkali they reveal its presence by changing from yellow to a pronounced blue, green or purple. There are micro-photographs to show the absorption of alkali, with distinction between soap and soda scours.

The practical bearing of the exhibits is clearer in some instances than others. One shows a collection of scoured wools of origins ranging from Lincoln to Kaffrarian merino ticketed with a statement of the sulphur content in each and showing proportions between 3.26 and 4%. Alongside are knitted goods in course of chlorination, from which it may be inferred that the presence of more or less sulphur has its importance in connection with unshrinkable finishes. A miniature humidity control apparatus and a micro-balance for weighing successive short lengths of yarn, thus testing its levelness, are new.

The permanent collection of textile exhibits at the Science Museum has been drawn on for only one or two items. That collection is not extensive and not always on public view but it includes pieces of strong historical interest and among them Arkwright's original carding, drawing and spinning machines, a replica of Crompton's mule and models of the first silk-throwing machinery employed in England, deposited in 1741 in the Tower of London by Sir Thomas Lombe, builder of the first textile factory of the regular type.

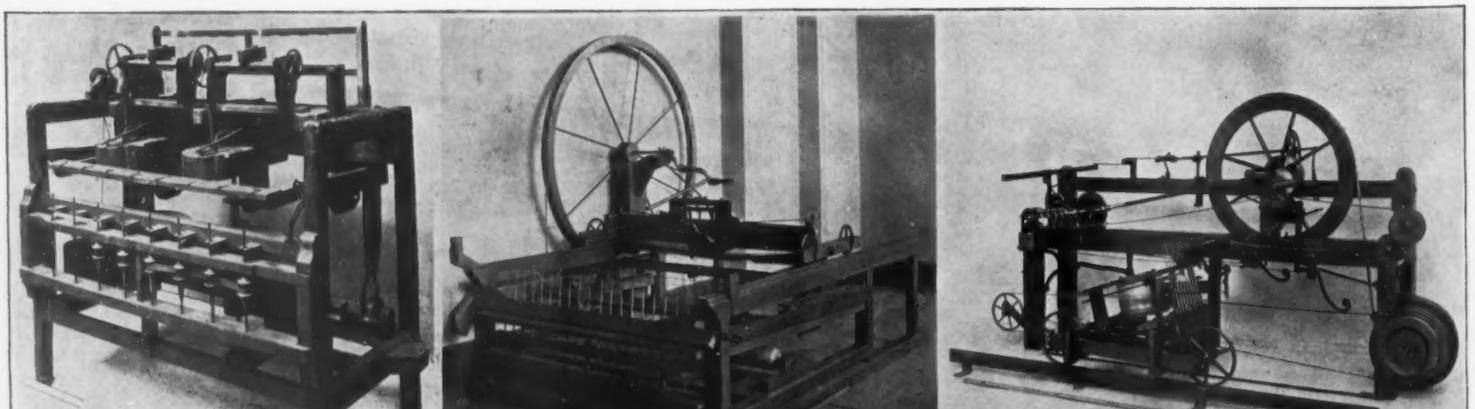
Next So. N. E. Textile Club Meeting in June

At the regular monthly meeting and dinner of the Southern New England Textile Club, held at the Biltmore Hotel, Providence, last Saturday afternoon, President John T. Balmer announced that there would be no meeting of the club in May, owing to the fact that so many members would want to attend the joint meeting of cotton manufacturers in Atlantic City May 12 to 14, but that the annual meeting and clambake would be held at the Pomham Club, Riverside, R. I., Saturday, June 18.

Approximately 160 members and guests of the club attended last Saturday's meeting, the chief feature of which was the address by Honorable Ira Lloyd Letts on "What is the Executive Arm of the Government?" Mr. Letts demonstrated himself to be a speaker of unusual brilliance and his subject was treated in a manner both interesting and instructive. Instrumental music was furnished by an augmented Hotel Biltmore Orchestra, and community singing was led by A. W. Couper, official chorister of the club.

At the last two meetings of the club the joint secretaries, William S. Pepperell, and Philip C. Wentworth, were much annoyed and inconvenienced by the large number of members who failed to send in advance acceptances for tickets, with the result at these two meetings that those delinquent in this respect were obliged to wait until extra tables could be provided. They desire to warn members that it will be difficult, if not impossible, at the Pomham Club meeting to provide for those who do not send in acceptances promptly.

FURTHER HISTORICAL EXHIBITS AT LONDON



(1) ARKWRIGHT'S WATER FRAME: So called because driven by water power, not by gin-horse. Made about 1775, it has three pairs of rollers, ratio 1; 1.6; 18.4. The spindle rail and bobbins are moved up and down by cam motion to secure even winding.

(2) HARGREAVES' SPINNING JENNY: A replica of the machine patented 1770, used for spinning soft filling yarn. The rovings are carried in the fixed creel beneath the carriage. No rollers are employed; the 6-foot traverse stretches the roving, the spindles twist it and the faller wire forms the cops. The precursor of the mule, it enabled the hand-spinner to produce 120 threads in place of the wheel-spun single thread.

(3) CROMPTON'S MULE: Samuel Crompton, whose bi-centenary is celebrated this year, invented the machine of which this is a replica in 1774–1779. "Muslin" wheel, from the fineness of its spinning and "Hall i' th' Wood" wheel, from the name of the inventor's home, were names by which it was originally known. The avoidance of strain between rollers and spindles avoids breakages and facilitates fine spinning.

Best Fine Goods Business in Years

New England Cotton Manufacturers Find Conditions More Favorable Than at Any Time Since 1920

NEW ENGLAND fine goods cotton mills are now doing the greatest volume of business in years. Conditions today, the manufacturers declare, are more favorable for reasonable profits than at any time since 1920. Stocks on hand are the smallest many of the textile men have known. Consumption is ahead of production for the first time since the war and orders are being received for deliveries as far in advance as December.

More than 108,000,000 yds. of fine goods were sold in the first three months of 1927 according to figures from a group of the New England mills obtained by the National Association of Cotton Manufacturers. This total shows a gain of 44% over the sales by these mills for the same period in 1926. Last year sales for this group amounted to 286,000,000 yds. and if the demand continues through this year as up to the present, the total for 1927 will be 432,000,000 yds. or an increase of 51% over the sales in 1926.

Stocks on hand do not average a total week's production. In some lines of high grade fabrics, an actual shortage exists. Because of this situation the hand to mouth buying, which has been one of the handicaps suffered by the manufacturer during the long period of depression, has been lessened materially. More than half the sales being made are for deliveries some months ahead, many of them for the fall and some even into December. At the same time, there is a general determination, textile leaders declare, not to carry stocks of goods but to produce solely to meet demands.

Better conditions than have existed in the last six years are seen by the fine goods manufacturers. They declare that cotton is tending to higher price levels, that there is no indication of a reduction in labor costs and that these factors taken together indicate that the mills are in a better position to obtain prices which will insure a reasonable profit than they have been at any time since 1920.

Secondary Markets

Cotton goods are moving well in the secondary markets and over the retail counters. The present situation in the dress fabrics market bears out the prediction by fashion experts made earlier in the year that cotton is the style fabric for 1927 and that more and more women are turning to the new dainty fabrics of cotton and cotton and rayon. Attention has been brought to the new fabrics through a series of style shows throughout the country, including the travelling fashion revue of the National Association of Cotton Manufacturers which completed three months' tour some weeks ago. Retail merchants from the Atlantic to the Pacific Coast have been devoting greater attention to their wash goods departments and a nation-wide movement is now underway to interest women in sewing.

Profits are declared to be better than they were four months ago but that they are still below a reasonable return for the mills in a number of lines. This situation, it is explained, is the aftermath of the long period of depression when mills sold at cost or, at times, below production costs rather than close down and leave their workers without employment. Shutting down mills, the manufacturers say, means a greater loss through payment of expenses than is experienced by selling at or near production costs.

Brisk buying developed in September but with the drop in the price of raw cotton there came a lull which continued until about the first of this year. Mills that had made a profit during 1926 saw this disappear with the taking of inventories because of the difference in the cost of cotton when they purchased it and the quotations at the end of the year. Indications are that this situation cannot develop in 1927 but that the costs of the raw material will be more stable.

Effect of Flood on Textiles

Still Obscure, but Influence on Cotton Price and Bearing on Cotton Goods Consumption Fairly Obvious

WASHINGTON, D. C.

THE economic effects of the Mississippi flood disaster still are obscure but there are three factors affecting the cotton textile industry which may be stated with some degree of assurance:

1. Sentimental influence has affected the price of cotton favorably.
2. From the standpoint of short planting the result is not going to be favorable.
3. Consumption of an extra amount of cotton goods during the period of rehabilitation in the devastated area will be offset by curtailed consumption elsewhere by reason of the advancement of prices.

There is no particular reason why the destruction of a potential 1,000,000 bales of cotton should influence the price. The Government has been known to raise its estimate of the crop 1,000,0000 or 1,500,000 bales within a fortnight with comparatively no price reaction. The price has surged upward on a wave of emotion in the market.

The reduction in the acreage planted to cotton this season is variously estimated at 10 to 15%. It is not too late yet to plant cotton in the Carolinas and the upper Mississippi region and it can be expected that many farmers will plant more cotton now in the hope that they will cash in on the boost providentially given to prices. Obviously, they will not report this additional acreage and the amount thus planted will remain an unknown quantity until the end of the season.

Effect on Goods Market

So far as could be learned here the Red Cross has not yet planned any large centralized purchases of cotton goods. Food and shelter is the first consideration. It is understood that immediate needs have been met by drawing on local stocks where available. A man does not need a nightshirt when he has no place to sleep, but there are many sewing circles throughout the country which, in misdirected enthusiasm, have squandered the funds in their treasury at the nearest dry goods store and have despatched supplies of these and other garments to stricken districts.

The demand for cotton goods will grow large in volume as orderly rehabilitation progresses but a market for say, 100,000,000 yds. will scarcely compensate the mills for a decrease in consumption in other parts of the country caused by higher prices, following the advance in cotton and in yarns.

The Department of Agriculture sent the following telegram on Monday to its branch offices in the South:

"Reports indicate that a good deal of cotton at compresses and warehouses in the flooded districts is under water. The approximate number of bales reported to date mostly in Mississippi in flooded area would reach possibly 150,000. About 50% of the cotton submerged in the State of Mississippi was of long staple varieties. Since the flood situation has become serious staple premiums are reported to have advanced considerably. Information from the Gastonia, N. C. district indicates the middling 1 1/16 is quoted at 425 points on New York July future contracts delivered Carolinas, 1 ⅛", 550 on New York July futures, 1 3/16" 725 on New York futures; and 1¼", 1200 on New York July futures. These premiums are about 100 to 150 points higher than those prevailing about a week ago. Egyptian Sakellardis cotton has advanced about 1c per lb. during the past week, with the better grades selling from 31½ to 32½c per lb. delivered New England points."

Atlantic City Cotton Convention

Merchandising the Principal Topic—Advance Reservations Assure Unusually Large Attendance

RESERVATIONS at the Hotel Traymore, Atlantic City, which is to be the headquarters of the joint convention of the National Association of Cotton Manufacturers and the American Cotton Manufacturers' Association on Thursday, Friday and Saturday of next week, together with advance reservations for the joint banquet, Friday evening, assure an attendance well in excess of 600, and it is quite possible that the total number present may approximate 1,000, and run a close second to the big joint convention held in Philadelphia in 1907.

Although the first formal sessions of both associations will not be held until Friday morning, a majority of members and guests will arrive Thursday afternoon or evening. A large party plans to leave Boston on the New York boat Wednesday evening, spending Thursday morning in New York City and arriving in Atlantic City about 6:30 p. m., daylight saving time.

PROGRAM

Thursday, May 12

7:00 P. M.—Board of Government Luncheon of American Cotton Manufacturers' Association.

Friday, May 13

10:00 A. M.—Annual Convention American Cotton Manufacturers' Association called to order by President Jas. P. Gossett.

Invocation.

Announcement of Committees.

President's Address: Jas. P. Gossett, Williamston, S. C.

Address: Hon. James A. Emery, Washington, D. C., General Counsel, National Association of Manufacturers.

Address: Dr. E. C. Brooks, President, North Carolina State College of Agriculture and Engineering, Raleigh, N. C.

10:00 A. M.—First Session Semi-Annual Convention National Association of Cotton Manufacturers.

Greetings from the President, William B. MacColl.

What Price Style Shows?—Laurice T. Moreland.

Discussion.

12:30 P. M.—Board of Government Luncheon of National Association of Cotton Manufacturers.

2:00 P. M.—Joint Session The National Association of Cotton Manufacturers and The American Cotton Manufacturers' Association under the auspices of National Council of American Cotton Manufacturers, William B. MacColl, joint president, presiding.

Topic: "Different Aspects of Merchandising."

Speakers: Spencer Turner, President, Association of Cotton Textile Merchants of New York; M. J. Warner, President, Converters' Association; Harry Lauten, Vice-President, Converters' Association; W. M. G. Howse, President, National Wholesale Dry Goods Association; representative of National Retail Dry Goods Association.

7:00 P. M.—Banquet, Stuart W. Cramer, Joint President National

Council of American Cotton Manufacturers, presiding.
Jas. P. Gossett, Toastmaster.
Speakers: Walker D. Hines, President, The Cotton-Textile Institute New York; J. Spencer Turner, President, The Association of Cotton Textile Merchants of New York. Officers of the American and National Associations.

Saturday, May 14

10:00 A. M.—American Association's Closing Session.
Report of the Secretary and Treasurer, W. M. McLaurine, Charlotte, N. C.
Report of the National Council of American Cotton Manufacturers, Stuart W. Cramer, Cramerton, N. C., Joint President.
Reports of Committees—
(a) National Committee: Stuart W. Cramer, Chairman.
(b) Traffic Committee: Geo. W. Forrester, Traffic Mgr.
(c) Special Advisory Committee: B. E. Geer, Chairman.
(d) Resolutions: H. R. Fitzgerald, Chairman.
(e) Nominations: C. E. Hutchison, Chairman.
Election of Officers.
Presentation of President's Medal.
Adjournment.

Boston to Atlantic City

Large Party of Cotton Manufacturers to Make Trip Together

A party of members and guests of the National Association of Cotton Manufacturers, that will probably aggregate more than 100, will make the trip from Boston to the Atlantic City convention next week on a tour arranged by the Joseph M. Shea Co., Boston, Mass., leaving Boston Wednesday evening at 5 p. m. (d.l.t.) by steamer of the Metropolitan Line to New York. They will have until 3:15 p. m. (d.l.t.) in New York City for business affairs, or for sight seeing trips arranged in conjunction with the tour, and are due to arrive in Atlantic City that evening around 6:30 p. m. (d.l.t.).

Members of Party

The members of this party who had secured reservations up to last Wednesday were as follows:

Robert Amory, Frank L. Bascomb, H. R. Barker, L. C. Bauldry, Robert W. Boys, Frederick M. Brown, Charles E. Buckley, Morgan Butler, C. F. Broughton, James Baldwin.

Samuel H. Capen, Jr., C. A. Chase, G. B. Chase, R. B. Chase, Mr. and Mrs. James E. Coburn, Edward H. Cook, B. S. Cottrell, Mr. and Mrs. P. E. Crocker.

Mr. and Mrs. Philip Dana, T. H. Dinneny, C. W. Eaton, Arthur L. Emery.

Russell T. Fisher, Robert H. Fisher, H. C. French, G. L. Gilmore, Thomas E. Glennon, E. D. Hague, Henry Harden, Mr. and Mrs. J. F. Havey, F. J. Hale, R. F. Herrick, Jr., Frank C. Hart, F. K. Hall, W. H. Hoch, S. E. Jackson.

Mr. and Mrs. H. G. Lord, Mr. and Mrs. W. F. Lowell, William B. MacColl, A. T. Malone, Roland W. Mackay, E. N. Morris, Miss D. M. Morgan.

Frank L. Nagle, Frank I. Neild, Arthur L. O'Leary, E. E. Palmer, Howard M. Parks, Mr. and Mrs. John A. Perkins, Endicott Putnam.

Andrew Raeburn, J. W. Rimmer, F. E. Rowe, Jr., Charles P. Slocum, D. Allen Smith, H. P. Snelling, E. W. Soucy, Dexter Stevens, James Strang, Jos. M. Shea, E. Kent Swift.

James O. Thompson, W. H. Underdown, Mr. and Mrs. Robert S. Wallace, Mr. and Mrs. Walter Whipple, Mrs. J. M. Whittier.

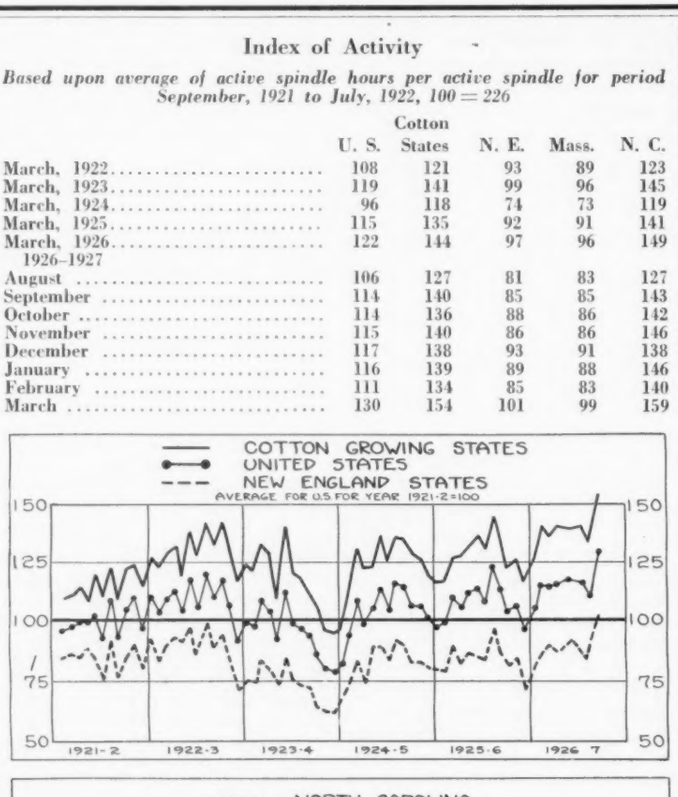
Cotton Industry Activity

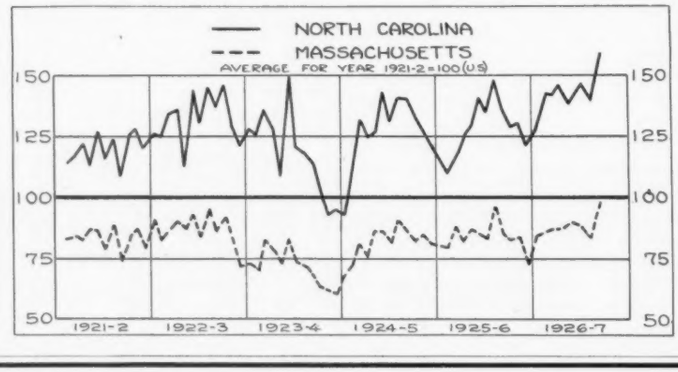
ACTIVITY of the cotton spinning industry in this country during the month of March broke all records for the period since August, 1921, when the Bureau of the Census commenced the collection of official figures for cotton spinning spindles in place and active, and for active spindle hours. This is true whether based upon a comparison of active spindle hours, or average active spindle hours per spindle in place, or with the average active spindle hours per spindle active, which latter set of figures is the basis of TEXTILE WORLD's index of cotton manufacturing activity. This index is based upon the average of active spindle hours per active spindle for the period from September, 1921, to July, 1922, which makes the base 100 equal 226. The indexes for March as tabulated and charted below were as follows: United States, 130; Cotton growing States, 154; New England States, 101; Massachusetts, 99; North Carolina, 159. The last previous periods of maximum activity were in March, 1926, March, 1923, and January, 1924. All of these figures except January, 1924, will be found in the index table and the latter were as follows: United States, 112; cotton States, 139; New England, 86; Massachusetts, 83; North Carolina, 150.

Index of Activity

Based upon average of active spindle hours per active spindle for period September, 1921 to July, 1922, 100 = 226

	U. S.	Cotton States	N. E.	Mass.	N. C.
March, 1922	108	121	93	89	123
March, 1923	119	141	99	96	145
March, 1924	96	118	74	73	119
March, 1925	115	135	92	91	141
March, 1926	122	144	97	96	149
1926–1927					
August	106	127	81	83	127
September	114	140	85	85	143
October	114	136	88	86	142
November	115	140	86	86	146
December	117	138	93	91	138
January	116	139	89	88	146
February	111	134	85	83	140
March	130	154	101	99	159





Will Precedents Prevail?

In view of this record-breaking activity the important question for all connected with the industry to ponder is whether the experience following previous periods of maximum activity is to be repeated; from the peak of March, 1923 to August of that year, there was an average decline in activity of a little over 25 points; from January, 1924 to August of that year, there was an average decline in activity of a little over 35 points; and from March of 1926 to August of that year, there was an average decline of nearly 26 points. As yet there is no indication of any such precipitate decline as was experienced in those years, and it is possible that the peak of the present movement has not yet been reached.

Print Cloth Men to Meet May 11

A further step in the development of The Cotton-Textile Institute will be taken when print cloth manufacturers from both North and South, including members and non-members of the Institute, meet at the Lawyers' Club, New York, to consider the formation of a print cloth group.

The Institute now has two groups definitely formed, namely, wide sheetings and narrow sheetings; and preliminary organization of the carded yarn group was effected this week as reported on page 149.

Sloan to Address Grocers

George A. Sloan, secretary of The Cotton-Textile Institute, will address the American Wholesale Grocers' Association at the Cotton Session which will feature their annual meeting at Louisville, Ky., on May 19. Mr. Sloan will discuss the possibilities of cooperation between the Institute and the cotton farmers.

Lee Rodman, president of the Indiana Cotton Mills, Cannelton, Ind., will also address the grocers, speaking on the possible substitution of cotton for jute.

Institute Enlarges Office Space

The Cotton-Textile Institute has taken additional space on the 11th floor of 320 Broadway, New York, adjoining its present offices. This enlargement was made necessary by the increasing number of departments being organized. The additional space provides a new office for George A. Sloan, secretary, and quarters for the New Uses Section, the statistician, and the cost accountant, when the latter has been appointed.

Cotton Growers Invite Institute Officials

It is understood that the president of the American Cotton Growers Exchange has invited the officers and members of the Executive Committee of The Cotton-Textile Institute to have breakfast with the officers and Executive Committee of the Exchange at the Hotel Traymore, Atlantic City, Saturday, May 14. The breakfast was planned in order that the officials of the Exchange might become acquainted with the officials of the Institute.

Cones Acquire Holt-Granite-Puritan Mills, Inc.

Bernard M. Cone, president of the Proximity Mfg. Co., Greensboro, N. C., has confirmed the fact that the Cone interests have acquired the plants of the Holt-Granite-Puritan Mills, at Haw River and Fayetteville, N. C. It was noted previously in these columns that C. C. Hudson, real estate dealer of Greensboro, was the highest bidder at the receiver's sale held April 4, and that the sale had been confirmed by the court.

Mr. Cone states that the Cone interests have not as yet decided what they will do with this newly-acquired property.

Cotton Stronger, but Rise Will be Limited

Supply of Raw Material Adequate to Prevent Large Sustained Advance—New Crop Prospects and Flood Situation Still a Puzzle—Probable Crop Not to Exceed 15 Million Bales—Yarns Are Burdened by Over-production—Cloths to Follow Cotton Influence

IT is too early to reach any very definite judgment concerning the flood situation as affecting the cotton market. The following discussion must be read with the understanding that cotton markets are now beset with such uncertainty that no man can foresee the outcome. Nevertheless, it is necessary to have some working opinion for the present, since many can not suspend operations pending the outcome of events. Undoubtedly there will be *some* reduction in the American cotton crop this year. It is as certain as such things can be that there will not be another extraordinarily large crop. Moreover, it is highly probable that the carry-over at the end of the year will not be as large as was feared. It is especially clear that the quantity of long staple cotton produced will be chiefly affected and that the price of such cotton is likely to be *relatively* high.

The best working hypothesis at present seems to be that the flood will directly result in making the crop something like one million bales smaller than it would otherwise be. This in itself would be sufficient, in view of the good outlook for consumption, to put the price up about 1c. As readers of the Analyst know, our judgment during recent months has been that about 14½c has been the true value of middling spot cotton at New York. ***It follows that the flood, considered alone, may be taken to justify the tentative opinion that New York spot cotton is worth about 15½c.*** Prices may and probably will go higher if other factors affecting the new crop continue unfavorable and the distribution of the old crop proceeds as actively as in recent months; but it seems conservative to say, on the basis of developments that have already occurred, that the market has correctly appraised the situation, and that an advance of 1c from the normal level of recent months is justified.

Bull Points

The bull points on cotton may be summed up as follows:

(1) *Regardless of the flood,* available evidence indicates that the crop this year will be considerably smaller than last year, a reduction of between two and three million bales being not improbable.

(a) All reports continue to indicate an average reduction in acreage of over 10% and such reports seem reasonable in view of the credit situation and unfavorable weather for planting.

(b) ***Evidence thus far available indicates a lower average yield than in the last two years.*** The weather in large sections of the South has been cold and rainy, which has delayed planting and retarded growth. It seems absolutely certain that the crop will have a late start, which always increases chances of damage. In most sections it is agreed that the sales and use of fertilizers will be much smaller than last year. Reports on boll weevil "emergence" indicate prospects of greater activity on the part of this pest. Credit conditions in a large part of the South are more strained than they have been in several years and the situation has been made materially worse by the flood. This will tend to affect unfavorably the cultivation of the crop and to limit replanting. In the flood stricken territory the loss of mules, implements, seed, etc., is a serious factor.

On the whole, ***it seems reasonable to base policies for the present on the assumption that the new crop is likely to fall under 15 million bales.***

(2) ***The flood has inundated upwards of three million acres and at present seems likely to mean a reduction of around one million bales in the crop,*** regardless of the condition already discussed. Even though replanted, the crop will have too late a start to have much chance of turning out favorably. In addition there is the loss of animals and equipment, the injury to the soil in some sections, and the strain on credit.

(3) ***The world consumption of cotton is running at record-breaking levels.*** There has been a large "distribution" which promises to be in the neighborhood of 18 million bales for the season. Mill consumption in the United States broke all records in March and exports continue to gain over preceding years. In fact, ***our exports have been notably sustained, and continued large interior sales indicate a further heavy outward movement.***

(4) Interior receipts and stocks are considerably smaller than last year.

(5) Premiums on distant futures continue large.

(6) The market for cotton goods continues large, while stocks of goods are on the whole low. Wholesale dry goods sales in March, though below last year, showed an upward trend. Orders for finished goods were ahead of last year, the sales of printed goods being notably large. Unfilled orders as reported by the Association of Cotton Textile Merchants of New York, and unfilled orders for knit underwear, have both increased.

Bear Points

The bear points are as follows:

(1) The reduction in the crop due to the flood is likely to be exaggerated. As the price rises, acreage that might otherwise have been put into other crops will be transferred to cotton. Experience with the last great flood in the Mississippi Valley shows that fairly good results may be gained by planting in the mud and that the loss was not as great as feared.

(2) ***The large "distribution" of the crop does not necessarily mean consumption, and the visible supply of American cotton in the world is very large.***

(3) While the carry-over in this country will not be as large as feared, it is practically certain to be ample.

(4) Conditions in Japan and China indicate that those countries will buy less raw cotton and possibly less cloth.

(5) The general business outlook is none too favorable and will tend for some time to affect unfavorably the textile industries.

(6) The advance in cotton prices thus far has been rather gradual and based chiefly on short covering.

(7) The yarn trade may fairly be called de-

Textile World Analyst

An analysis and forecast by Dr. Lewis H. Haney, Director, New York University, Business Research Bureau, who considers various branches of the textile industry from week to week. The conclusions reached in the Analyst are mostly forecasts and generally apply to a time two or three months ahead. The Analyst is based on statistical data and does not reflect temporary trade sentiment.

SUMMARY—COTTON

1. Raw cotton prices are fundamentally stronger, due to a stronger statistical position and continued large exports. The normal value appears about 1c higher. The supply is still sufficiently abundant to make any large sustained advance improbable, but has been reduced enough to allow fairly sharp speculative advances on crop scare news.

2. Yarn markets continue under the influence of over-production.

3. Cloth demand, considered as a whole, has recently been disappointing and cloth prices appear likely to average only about stable, under the influence of higher raw cotton.

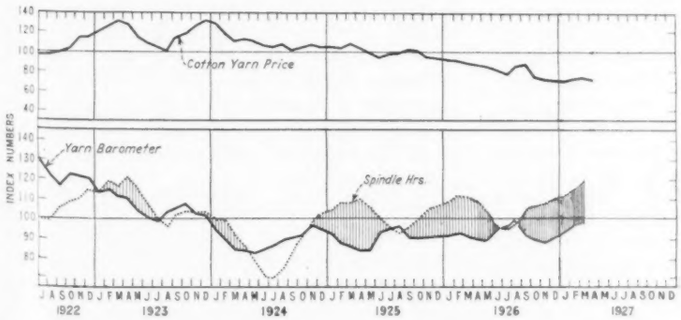


Fig. 1. COTTON YARN BAROMETER—Cotton Yarn Price—TEXTILE WORLD Index. Spindle Hours—Three-month moving average (Dept. of Commerce). Yarn Barometer—Based on orders for cotton cloth. Average of recent years = 100 for all indexes.

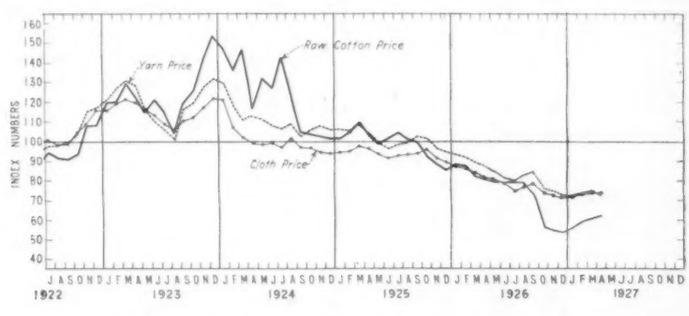


Fig. 2. PRICE SPREADS—TEXTILE WORLD index numbers, average 1921–1925 = 100.

pressed, and prices averaged lower in April. It is quite rare for cotton goods to advance long with yarn prices weak.

(8) The gray goods markets have recently been rather dull with prices barely steady. The billings of finished goods in March were relatively high compared with orders; and stocks of finished goods, though small, were increasing. New York cotton jobbers' sales increased less than usual in March.

Obviously the chief factor now tending to hold down cotton prices is the relative weakness of the markets for cotton textiles. Outside of certain fine goods, these markets are not very strong and give the impression of being held up only by the advance in raw cotton. The upward trend of dry goods sales in March, however, is encouraging in this respect, and, with the style trends as favorable to cotton as they are, it seems probable that textile markets will be sufficiently strong to support somewhat higher prices for the raw material. Meanwhile, ***the cotton market shows clearly that the weight of last year's large crop has been sufficiently relieved to allow it to respond promptly to weather scares.***

The Statistical Position

The statistical position of cotton continues so easy that it seems that the inevitable speculative advances on crop scares are not likely to go far. The following statement shows the situation as of March in comparison with that of a year ago.

Statistical Position (000 bales)

	Mar. '27	Mar. '26
Available in U. S. at beginning of month	**9,961**	**8,164**
Imports	**41**	**46**
Total supply	**10,002**	**8,210**
Mill consumption	**694**	**635**
Exports	**1,129**	**520**
Total distribution	**1,823**	**1,155**
Available at end of month	**8,179**	**7,055**
Avg. per month (4)	**2,045**	**1,764**

There were available at the beginning of this year 21,753,000 bales, including imports. Mill consumption seems likely to run around 7,000,000 bales and exports may easily run up to 11,000,000 bales, making a total disappearance of about 18,000,000 bales. Thus the indicated carry-over is now only about 3.7 million bales, against earlier indications of around 4½ million. ***While this tends to a little greater firmness, it does not indicate any reason for much further advance.*** If the crop next year amounts to only 14½ million bales, there would be a total domestic supply of about 18 million bales, or just about enough to cover total distribution at the current estimated rate. The large visible supply abroad, however, indicates a good-sized world carry-over of American cotton.

Yarn Markets Fundamentally Weak

Yarn prices averaged slightly higher in March, our index being 73.5% of the 1921-25 average against 72.9% in February, and 89% a year ago. In the early part of April the trend was downward, advances appearing at the end only on account of higher raw cotton. Raw cotton has advanced at this writing about 1c. Sales of cotton goods are large. Ordinarily yarn prices should have shown a good advance, especially as spinners' margins, with the exception of July last year, are the lowest since the middle of 1924.

There is but one reason for this situation, namely, overproduction. Cotton spindles are turning out more yarn than can be sold at profitable prices. Our yarn barometer tells the story. (See Fig. 1.) As usual, yarn prices showed some response to the rise in the barometer line that occurred in December and January. But that response was quite slight and feeble. The reason lies in the high rate of spindle activity. The active spindle hours in March were greater even than in March, 1923. A period of such high activity, especially with orders for cloth no greater than they are, can hardly exist without weakness in yarn markets. One of two changes must occur if further weakness is to be prevented: either there must be a sharp curtailment in spindle activity, or a sharp gain in the demand for cloth. Just at present neither seems likely. Of course, higher raw cotton is tending to bolster up the yarn markets and has already brought some advances (particularly in the finer grades); this will not help the spinners' margins.

Cloth Markets Continue Irregular

The relative cheapness of cotton and the increased vogue of fine cotton goods, are tending to make a good market for cotton textiles. It does not seem, however, that the general demand is strong enough to support much advance in prices. The TEXTILE WORLD cloth index averaged unchanged in April at 73.4% of the 1921-25 average. Current replacement margins decreased owing to higher raw material.

Wholesale dry goods sales are barely fair. The billings of finished goods are large in comparison with orders, and stocks have increased, considering the season. Common sense indicates that the most wanted style goods will be strong and that higher raw material will support cloth markets; but it seems probable that staple lines will be maintained with difficulty and only hold about stable.

TEXTILE WORLD Cotton and Wool Index Numbers

THE APRIL INDEX NUMBERS

NEITHER the index numbers for the cotton nor the wool groups for April reflect the improvement in prices and demand that developed during the last week or two of that month. In the cotton group a stiff advance in raw material prices has been accompanied by a moderate advance in yarns, but with only a slight reflection in goods values thus far. In the wool group slight additional weakness in crossbred wools and fine tops has exerted no appreciable influence upon yarns or cloths, both of the latter being supported by an improved demand.

The indexes for the cotton group for the last week of the month are a better reflection of present conditions than the averages for the whole month, and are as follows: Cotton, 122; yarns, 141; gray goods, 144; colored goods, 142; group average, 141. Yarns and cloths remain relatively low as compared with replacement cost of the raw material, and, irrespective of the future course of cotton prices, are due for a further advance unless expanded production should exceed demand.

For the fourth week of April the indexes for the wool group are as follows: Wool, 176; tops, 182; yarns, 184; cloths, 211; group average, 196. The wool index is lower as a result of weakness in coarse grades, and the top index because of competition for business on the finer qualities, and as lower prices have stimulated better demand for both the weakness may be only temporary. Yarns continue more or less nominal in price, and the lack of change in the index number merely reflects the continuance of an uncertain and unsatisfactory situation.

Inquiries regarding interpretation and use of the index numbers may be addressed to TEXTILE WORLD, Statistical Department, 65 Franklin St., Boston, Mass.

COTTON INDEX NUMBERS

Date 1914	Cotton	Yarns	Gray Goods	Colored Goods	Aver. for Cloths	Group Average
July 31	**100**	**100**	**100**	**100**	**100**	**100**
1919						
January	235	278	280	295	288	279
April	228	221	228	238	233	226
July	283	321	372	292	330	321
October	278	324	387	320	351	337
1920						
January	314	448	464	411	435	427
April	339	531	498	416	455	460
July	327	425	405	423	414	407
October	190	229	248	362	308	282
1921						
January	131	142	176	203	190	175
April	97½	116	138	182	161	147
July	97½	112	133	176	155	141
October	160	179	198	208	203	193
1922						
January	146	168	174	206	191	182
April	144	156	168	209	189	178
July	178	182	190	200	195	189
October	177	192	206	201	203	197
1923						
January	225	225	220	230	225	225
April	231	239	224	242	233	234
July	217	197	190	236	212	211
October	237	222	212	225	219	219
1924						
January	278	241	228	243	236	239
April	220	211	192	194	193	198
July	270	198	186	191	189	196
October	195	196	187	189	188	199
1925						
January	192	197	195	173	184	187
April	196	194	193	180	187	188
July	197	183	185	176	181	182
October	174	189	193	178	186	186
1926						
January	167	175	177	162	170	171
April	153	163	161	155	158	159
July	149	149	151	141	146	147
October	106	141	147	144	146	143
1927						
January	107	134	140	140	140	138
February	113	136	143	141	142	140
March	114	137	144	142	143	140
April	118	136	143	142	143	140

WOOL INDEX NUMBERS

Date 1914	Wool	Tops	Yarns	Cloth	Group Avge
July 31	100	100	100	100	100
1919					
January	272	296	290	237	273
April	242	282	273	237	255
July	269	290	238	237	272
October	286	338	384	240	294
1920					
January	304	335	412	310	336
April	276	334	448	331	352
July	241	258	384	320	315
October	189	213	302	304	276
1921					
January	129	148	186	224	193
April	120	148	177	192	173
July	112	139	172	192	170
October	114	135	162	188	165
1922					
January	128	163	179	182	173
April	165	185	185	184	182
July	189	202	196	188	193
October	199	209	208	191	199
1923					
January	212	225	227	203	213
April	222	230	234	225	228
July	222	223	233	228	227
October	205	213	222	224	220
1924					
January	217	227	221	223	223
April	216	230	223	219	221
July	191	209	212	219	213
October	227	237	224	226	228
1925					
January	264	268	253	228	244
April	219	234	230	241	233
July	216	217	216	239	227
October	216	212	212	227	220
1926					
January	215	213	211	229	221
April	181	193	198	224	208
July	173	184	189	215	199
October	178	186	193	209	198
1927					
January	178	187	190	209	198
February	179	186	188	211	198
March	178	183	184	211	196
April	177	182	184	211	196

Editors
Charles H. Clark Vernon E. Carroll
Clarence Hutton Douglas G. Woolf

EDITORIAL

We Believe
In the Conservation and Protection
of Domestic Industries

The Machinery-In-Place Fallacy

THE fallacy of accepting "spindles in place", or the total amount of any other basic machinery installed in an industry, as a measure of that industry's potential productive capacity is demonstrated by comparative figures of cotton cloth production in Great Britain and Japan for the calendar year 1926 for the latter country, and 1924 for the former, the British figures being for the only available census year, and the figures for Japan being those for member mills of the Japan Cotton Spinners' Association. The British cotton industry, with approximately 57,000,000 spindles, produced 5,425,961,000 yards of cotton cloth in 1924, or 95 yards per spindle; Japan, with approximately 5,700,000 spindles, produced 1,277,728,000 yards of cotton cloth in 1926, or approximately 224 yards per spindle.

With ten times the number of spindles Great Britain produced only 4¼ times the yardage of cotton cloth turned out by Japan, while Japanese production was nearly 2⅓ times that of Great Britain, figured on a spindle basis.

Further conclusive evidence of the fact that the spindle or loom in place are not accurate yardsticks of the potential productive capacity of an industry is found in the fact that Japan for the year ended January 31, last, consumed more bales of cotton than did Great Britain, the figures being 2,915,000 bales for Japan and 2,792,000 bales for Great Britain. That these figures afford nothing more than a very rough basis of comparison will be readily admitted. Pounds, and not bales ranging in size from 350 to 750 pounds, is the correct basis of comparing cotton consumption; in comparing production, also, the total pounds of yarn is a better yardstick than cloth production alone or combined with yarn production; and any fair comparison of yarn production demands proper recognition of average count of yarn produced.

The comparative figures of spindleage, cotton consumption and cloth production, however, even after making full allowance for the other factors mentioned, demonstrate that the productive capacity of a Japanese spindle is enormously greater than that of a British spindle, as operated in these countries in recent years. It is a case of greater machine activity in Japan than in Great Britain, or a relatively larger percentage of total Japanese spindleage being constantly operated on a night and day basis, as compared with a maximum 48 hour week and a large percentage of spindle inactivity in Great Britain.

The relatively small investment per spindle, and the relatively large daily productive capacity per spindle, rather than lower wages per pound and yard, are the reasons why Japan is cutting more and more deeply into British export trade in cotton yarns and cloths. Inherent skill in manufacture is impotent in the face of such handicaps, and even if combined with equal labor cost per pound and yard it is doubtful if it could overcome the advantage of such a marked difference in operating hours. It is not surprising, therefore, that the British cotton industry should await impatiently the time when Japan, as a signatory of the International Labor Conference, shall put into effect the 48 hour working week—if she ever does.

* * *

Psychology and Cotton Goods

EVERYONE knows that the cotton goods business has been improving steadily but it takes cold figures to portray the full extent of that improvement. Such information has been released from time to time by the Association of Cotton Textile Merchants of New York.

Further evidence has just been supplied in a statement by the National Association of Cotton Manufacturers, published elsewhere in this issue. It shows that fine cotton goods sales by a group of New England mills for the first three months of 1927 represented a 44% increase over sales by these mills for the same period of 1926; and reports that conditions are regarded as "more favorable for reasonable profits than at any time since 1920."

THE TEXTILE TREND

Cotton Markets: Merchants generally optimistic, though scanning events carefully. Continuation of former prices on prints, ginghams and denims a victory for stabilization for many believe small advance could have been established. Print cloths firm up with bottom prices disappearing. Primary market withholds judgment on flood, but believes staple cotton market most affected. Call merchandise losses so far small.

Wool Markets: Better spirit in wool goods market. Gradual accumulation of fall orders begins to show sellers they are getting somewhere. More duplication from clothiers. Sellers talk of need of advancing prices. Closing down of mills gradually narrowing source of supply for cutters. Activity in yarns for men's wear and outerwear, with better outlook for fine dress goods qualities in next month.

Knit Goods Markets: Reduction by Berkshire of full-fashioned hosiery 25 to 40c per dozen was surprise to market. Believed to be meeting anticipated competition before it comes. Hosiery generally well conditioned with buyers pressing for deliveries of all sorts of goods. Underwear quiet, weather against spring goods and delay of jobbers in getting fall orders holds back duplication on those lines.

Silk Markets: Pace of broad silks moderates a trifle with orders mostly for nearby deliveries. Large forward business on fall satins appears over for time being, due to advances. Immediate trade concerns itself with flat crepes, georgettes (which are slightly firmer in price), and prints and other materials suitable for summer dresses. Weaving operations slacken slightly due to higher raw material costs.

Naturally, there have been several causes contributing to this expansion, but we wonder if the industry at large gives due credit to one of these, namely, the psychological effect of the new cooperative spirit as reflected in the formation of The Cotton-Textile Institute.

This phase has been referred to casually in these columns before. At first, the reference was a rather hesitant one, because even an editor quails before the fear of being called "academic," "theoretical," "visionary" or such bad names.

Recently, however, hard, cold business men—in fact some of the hardest and coldest in the cotton manufacturing industry (and that's going some)—have been heard to express this same thought in private conversation.

It is true that the Institute has been largely in the organization stage and has not had the opportunity to accomplish many definite things which have a direct bearing on the situation. Nevertheless the knowledge that it is in existence, that it is under the guidance of the right man, that it is approaching, in a scientific way, the broad questions facing manufacturers, is sufficient to infuse a spirit of optimism into the industry—and this in turn has been reflected among buyers.

As an example of the immediately salutary effect which sound cooperation can have upon an industry, we cite the cotton goods field. We cite it for the benefit of wool manufacturers and others who have not yet progressed definitely in this direction.

* * *

Full-Fashioned Hosiery Cut

REDUCTIONS in prices on full-fashioned silk hosiery by the leading manufacturer are variously interpreted by the trade. Naturally the first explanation which is given by competitors is that the company responsible for the reductions is not selling its output and is adopting ways and means to accomplish this end. It may be said in answer to this argument that there is sufficient authority for stating that the output of this mill, which at maximum capacity can turn out 2,500,000 dozen pairs a year, is well taken care of and on certain numbers, especially in resist heels, much more could be sold if reasonable deliveries could be promised.

What seems to be a more logical explanation of this action is that the concern in question is taking a long look ahead. It has undoubtedly on its books firms who may do a certain amount of manufacturing but who in addition supplement their own lines by purchases of this concern's product. Every one knows there has been a tendency to increase the output of full-fashioned hosiery which will make manufacturers out of certain buyers. If it can be demonstrated that the purchase of full-fashioned from a large producer is more profitable than the manufacture of the same article by a mill which does not have the advantage of as low an overhead it may be possible to check the tendency to embark in

the full-fashioned game. In other words, the price reduction may be an element in preventing increased competition as well as over-production of a commodity of which the present output can be consumed without apparent difficulty.

Another element which may contribute to the naming of lower prices is the possible belief that prices of raw silk may not continue indefinitely on their present level. It is conceded that leaders in the hosiery field covered a very fair proportion of their raw material requirements at a figure considerably below to-day's level and though silk prices at present would not permit purchases which would show a profit on manufactured goods at the new level, it is not necessary for the leaders to figure upon current replacement costs. With the smaller members of the industry who have not covered on silk such replacement costs may be a very important factor.

Then again it is said to be the belief of careful students of the situation that when new silk commences to arrive on the market prices will decline. The date for such a possible change is given as the last of May or first of June, which may mean the possibility of reducing production costs materially. To put it in another way, there is little necessity of the leaders in the full-fashioned industry following closely the current movements of raw silk and therefore the price cut may not be as illogical as might appear on the surface.

* * *

Extra Staple Situation Critical

THERE is no longer any question but that the status of extra staple cottons, or staples longer than Association 7s (full 1 5/32) for the balance of this season and for the new crop is critical. The planting of such cottons last year was restricted very closely to the Delta areas of Mississippi Arkansas and Louisiana now flooded, Delfos seed largely displacing such cottons on alluvial lands, and there is little hope that the waters will recede from inundated lands in time for their planting with slow-maturing extra staple cottons. It may mean a reduction in new crop acreage of Association 7s and longer staples of 25 to 50%, or even more, if, as some claim, much of the available supply of seed has been irretrievably damaged by the flood.

As compared with prices of two weeks ago there has been a net advance of 300 to 400 points on Association 7s and longer cottons, with many shippers refusing to quote on anything higher in grade than middling or for new crop delivery; furthermore, they will sell only on actual samples. The advance in Egyptians has been more acute than that in domestic extra staples, the rise in Sak. futures within the last two weeks ranging from 450 to 500 points, over 200 points of this being scored on Tuesday and Wednesday of this week, largely due to hedge buying of new crop futures, accompanied by selling of American futures on the New York and Liverpool exchanges, as insurance against an expected advance in premiums on extra staple cottons.

With the Egyptian Government committed to a radical reduction of acreage devoted to cotton this season there appears to be no hope of an increased yield of extra staples in any part of the world to offset the probable decrease in the Delta of the Mississippi. Even an expected moderate increase in the Pima supply is menaced by an extension of the pink bollworm quarantine. From the manufacturer's standpoint advance in extra staples is as untimely as it is unfortunate, for it coincides with the first marked improvement in demand for combed and fine count yarns and cloths that has been experienced for several years. It is to be hoped that this demand is independent of price to the extent of the present rise in cotton values, for an abnormal premium upon extra staples is bound eventually to shift demand to yarns and fabrics of lower quality. In the meantime, the mills owning extra staple cottons are fortunate, provided that supply has not been covered with orders at recently abnormally low values.

Program for Engineers' Meeting

The program has been announced for the joint meeting of the Master Mechanics Division of the Southern Textile Association and the Greenville Branch, Carolinas Section, American Society of Mechanical Engineers, to be held at the Poinsett Hotel, Greenville, S. C., at 10:00 a. m., on Wednesday, May 18. At 10:45, following registration of members, the meeting will be called to order in the ball room of the hotel. The following papers will be read and discussion of each called for:

1. *Some Cotton Mill Machine Shop Methods*, by G. T. King, superintendent of power, Lancaster (S. C.) Cotton Mills.

2. *Why Should Electric Power Consumption Appear to Vary over Stated Periods during Which Production Hours Are the Same?* by George Wrigley, electrical engineer, J. E. Sirrine & Co., Greenville, S. C.

3. *Care and Maintenance of Steam Power Plants*, by David J. Kerr, superintendent of power, Champion Fibre Co., Canton, N. C.

Luncheon will be served at 1:15 p. m. at the Poinsett.

Phila. Wool Dealers Asked to Aid in Beetle Extermination

PHILADELPHIA.—U. S. Department of Commerce, Bureau of Entomology, has issued regulations for Japanese beetle quarantine for New Jersey and portions of Pennsylvania, Delaware, New York and Connecticut. Department representatives have been in communication with wool dealers in this city in connection with their plans to fight the beetle this year seeking opinion of the trade as to best methods to adopt to prevent spread of the beetle, especialy during July and August when greatest damage is done, by means of shipments of wool going outside of the quarantine districts. While no definite instructions have been issued to wool dealers here the Bureau is planning to ask them to cooperate to make certain that shipments of wool in this territory do not aid in the spread of the beetle.

COTTON GOODS ON THE AIR

Features of the new fashions in cotton for children were broadcast by radio on Friday of this week through Station WEAF. Miss Maida Davis, fashion specialist, who broadcasts through this station each week described the new summer cottons for children in her part of the program on Friday, beginning at 11:40 a. m.

"This innovation establishes a precedent in our industry and in a very real sense puts cotton in the air," Spencer Turner, president of The Association of Cotton Textile Merchants of New York, stated in his announcement of this event on Wednesday. "It is our hope to extend this introductory lecture to a series which will be both interesting and helpful to the women of the country."

TEXTILE CALENDAR

National Association of Worsted and Woolen Spinners, Annual Meeting and Luncheon, Waldorf-Astoria Hotel, New York City, May 11, 1927.

National Association of Cotton Manufacturers and American Cotton Manufacturers' Association Joint Convention, Hotel Traymore, Atlantic City, N. J. May 12-14, 1927.

International Association of Garment Manufacturers, Annual Meeting and Exhibition, Stevens Hotel, Chicago, May 17-19, 1927.

Master Mechanics' Division, Southern Textile Association, Meeting. Greenville, S. C., May 18, 1927.

National Association of Woolen and Worsted Overseers, Semi-Annual Meeting, Rocky Point, R. I., May 21, 1927.

Lowell Textile School Alumni Association, Annual Meeting and Banquet, Southwick Hall, Lowell, Mass., May 21, 1927.

Bradford Durfee Textile School Alumni Assn., Tenth Annual Business Meeting and Banquet, Mellen Hotel, Fall River, Mass., May 28, 1927.

Philadelphia Textile School Alumni Association, at Philadelphia; Annual Business Meeting, June 2; Annual Outing and Banquet, June 3, 1927.

Southern Textile Association, Annual Meeting, Kenilworth Inn, Asheville, N. C., June 17-18, 1927.

Cotton Manufacturers' Association of North Carolina, 21st Annual Meeting, Grove Park Inn., Asheville, N. C., June 24-25, 1927

Cotton Manufacturers' Association of South Carolina, Annual Meeting, Grove Park Inn, Asheville, N. C., July 1-2, 1927.

National Exposition of Hosiery and Underwear, Waldorf-Astoria, New York, July 18-23, 1927.

Chemical Industries Exposition, Grand Central Palace, New York, Sept. 26—Oct. 1, 1927.

Australian Industrial Delegation

Philadelphia Chamber of Commerce has completed plans for entertainment of the Australian industrial delegation when it visits that city in the next few days to make an inspection of leading industries and plants in the city. Delegates will spend two days making an intensive study of industrial methods followed in this city. According to J. W. Purner, secretary of the Foreign Trade Bureau of the Chamber of Commerce, the delegates are charged with making this investigation in order that a report may be made to the Australian Government which probably later will be made the basis for action by that body.

Northern Mississippi Farmers Plant Cotton Behind Levees

MEMPHIS, TENN.—Behind the huge levees along the 120-mile river front in Northern Mississippi farmers are planting cotton right along just as if the river were normal, as the levees in that section are considered among the best on the entire river. The levees stand from 2,500 feet to two miles back from the river banks, 50 feet high and with bases of 250 to 500 feet, are lined with concrete on the river side and covered with grasses on the land side.

Specifications on Cotton Rope

WASHINGTON, D. C.— The Bureau of Standards has just published the Government master specification for cotton rope. Requirements as to quality of fiber, strength, etc., are included for rope ¼, ⅜ and ½-inch in diameter. The specification has been mandatory on all Government establishments since Nov. 22, 1926.

Host to Engineers

Cleveland Worsted Mills Co. Opens Plant

The Cleveland Worsted Mills Co. opened its main plant in Cleveland, O., on Tuesday, April 26, to the Cleveland Section of the American Society of Mechanical Engineers and the Cleveland Engineering Society. It was the first time this had been done in the history of the concern. The trip through the plant and the meeting which followed were arranged by the Executive Committee of the Textile Division of the A. S. M. E.

The members of the two organizations assembled in the large recreation room in the main building and were welcomed by O. B. Green, secretary and treasurer of the company; J. C. Ewen, assistant secretary; F. F. Stafford, assistant general manager; McRea Parker, chief engineer, and W. M. Campbell, assistant engineer. Squads of 12 men each were escorted through the plant by officials of the company.

A dinner was served at 6:00 p. m. in the company's restaurant in the main building, 132 guests being present.

Evening Meeting

The evening meeting was held in the recreation room of the main building and presided over by McRea Parker, a member of the Executive Committee of the Textile Division.

The first speaker was James W. Cox, Jr., of New York, vice-chairman of the Textile Division. He first told briefly of what the Division had done, was doing and what they were attempting to do in the industry. He then addressed the meeting on "The Need of Trained Engineering Minds in the Textile Industry." Mr. Cox covered the advancement and present status of various divisions of the engineers in the industry, particularly as to buildings; generation and use of power; machinery, equipment, processing and management. He brought out the need for improvement along certain lines, and showed where the engineer was needed.

F. F. Stafford next addressed the meeting, his subject being "The Manufacture of Worsted Yarns and Cloth."

R. C. Brett, chairman of the Cleveland Section of the A. S. M. E., was unable to attend because of illness. W. P. Brown, president of the Cleveland Engineering Society, spoke for both organizations.

After Mr. Brown's talk, Mr. Cox and Mr. Stafford answered many questions in regard to the work of the engineer in the textile industry and the manufacture of worsted materials.

Ladies' Night at Greenville Textile Club

GREENVILLE, S. C.—Thursday, May 19, has been designated as Ladies' Night for the Greenville (S. C.) Textile Club, the supper meeting to be held in the Parker High School cafeteria. A program of entertainment is now being arranged for the occasion.

Constructive Optimism—A Remedy

Why Does Wool Goods Trade Fail to Grasp Its Opportunities?—Ask Me Another

By L. G. Salembier

IT seems futile to dwell everlastingly on the evils which surround the various divisions of the textile industry. We will never get anywhere by continuing to bemoan our fate, unless such an attitude leads to constructive activity to better the situation. Everyone knows that enough has been said and written about the inherent abuses which are so apparent to every close student of textile conditions. Action has been taken in certain sections which would seem to augur well for the future. At least something is being done. The woolen industry, however, seems to be in a state of suspended animation, although courses of action which would seem constructive in their nature have been suggested and in some cases considered. If this trade is to keep step with other divisions of the industry it is high time some specific move were made. Mistakes might be made as they are likely to be made in other quarters, but at least such a move would indicate that those interested in the manufacture and sale of wool goods are as much alive to the situation as those connected with other branches and are as determined to develop a remedy as any other class of merchants.

Again the Dictator

A year ago in these columns the possibility of selecting a dictator—or a leader if the former word is objected to—was suggested. Since that time the cotton goods industry has selected a leader and so has the cloak and suit trade. These are both outside the ranks of the industry and the response of the respective trades has been enthusiastic and practically unanimous. If such action can be regarded as feasible in these two branches why could it not be accomplished in the wool goods field? We have heard the argument that no outsider, ignorant of the industry's manufacturing and merchandising details could hope to advise or dictate regarding policies in an industry as diverse as this. They say that style plays such an important part it would be impossible to lay down any hard and fast lines of action which would apply to all. Personally, I feel that it would be easier than in cotton goods and it certainly would be hard to imagine any industry where it would be more difficult to persuade the individual units to march under one banner than the cloak and suit trade. And yet both are developing a policy of cooperative action under outside management. It is too much to expect that there would be less chance of success in the wool goods field?

How Pessimism Works

It is a significant fact that notwithstanding the decrease in capacity which has resulted from enforced curtailment and liquidations throughout the industry conditions with reference to consumption are apparently no better. Perhaps they are worse. I do not think, however, anything is to be gained by looking on the gloomy side of the picture or by prophesying that things will never be better. Many times I have seen western buyers come into this market resolved to buy liberally. But after going around the market they have changed their tune entirely and have frequently gone home without placing anything but the most insignificant orders. What caused this change? Nothing more or less than the generally pessimistic attitude of selling agents. The latter are frequently responsible for restricted buying, the blame for which they lay too often upon the lack of judgment displayed by the buyer. Textile markets are very much like the stock market. Let everybody get blue and start to unload, and prices of stocks go down. On the other hand, if securities are in firm hands and the majority are bulls on the situation and the outlook, the market is almost bound to advance. It is psychological. Get the ball rolling in one direction and it will increase in size and velocity by its own momentum. General prosperity should help all industries and there is no reason the textile trade should be an exception to the general rule. Good merchants in other trades are characterized by their ability to grasp opportunities, not only for their own advantage, but for the benefit of their industry at large. In our business there seems to be a lack of such ability or if it is possessed it is not used in any general or pronounced way.

Possibilities of Propaganda

Has the woolen trade realized the possibilities that lie in the skilful use of propaganda? This is so far-reaching a matter that the results of efficient publicity are hard to realize. Parallels can be drawn from other industries which would seem to have their application to the woolen trade. What is it that has made it a general custom for men to discard their felt hats and put on straw hats on a certain date? This did not come about out of thin air. Somebody was responsible for it, and the result is that the man who is seen with a felt hat after a certain date or a straw hat after another date in the fall is the exception. Why could this not be done in the textile field? Formerly the majority of women bought their spring apparel before Easter, and for fall before Thanksgiving. Would it not be possible to cause a reversion to this method of buying by skilful publicity? The result of the present course is that the majority of consumers wait until they need a new garment—and this is particularly true of men—before they buy something new. The consequence is that very often the old garment is allowed to serve much longer than might otherwise be the case if it were the vogue to buy new

(*Continued on page* 148)

INVITATION TO RESEARCH CONFERENCE

An invitation to attend the research conference, to be held at the Hotel Traymore, Atlantic City, at 12:00 noon, Friday, May 13, by The Textile Institute Club, is extended to all members of the American Cotton Manufacturers Association and the National Association of Cotton Manufacturers, who will be in attendance at the joint convention of these organizations.

William Malcolm Corse, secretary of the Directors of Industrial Research, will speak on "Industrial Research Accomplishments in the United States," and the discussion to follow will be led by Dr. W. F. Edwards, of the United States Testing Co., and president of the Textile Division of the American Society for Testing Materials.

Owing to limited accommodations, those desiring to attend the luncheon meeting at $4 a cover, or the following speaking session, should send their acceptances to be received not later than Wednesday, May 11, to C. H. Clark, secretary-treasurer, 65 Franklin St., Boston, Mass.

THE TEXTILE WORLD Quiz

QUESTIONS

No. 1—What textiles can be torn from the bolt?
No. 2—What textiles must be cut?
No. 3—What action takes place when wool fabrics are sponged?
No. 4—What is cassimere?
No. 5—How is the wool test applied?
No. 6—How did cambric get its name?
No. 7—What is the fabric alpaca?
No. 8—What factor denotes the "count" of cotton cloth?
No. 9—What is "tret"?
No. 10—What is the fabric known as montagnac?

(Answers on page 133)

THE PERSONAL PAGE

W. Lunsford Long tendered his resignation as president of the Rosemary Mfg. Co., Roanoke Rapids, N. C., at a recent meeting of the board of directors and requested that it be accepted because he found it necessary to devote more time to his varied enterprises. The resignation was accepted and **Thomas C. Wilson**, of New York, head of James L. Wilson & Co., selling agents for the mill, was elected to the office vacated by Mr. Long, who will remain as one of the directors. **W. S. Parker**, of Henderson, resigned the office of treasurer of the Rosemary Mfg., Co., and was succeeded in this office by **S. T. Peace**, of Henderson, now president of the First National Bank of that city. **William L. Manning** will continue as vice president and manager of the Rosemary company, and **E. W. Lehman** will continue as secretary. The same day the board of directors of the Roanoke Mills Co. accepted the resignation of Mr. Long as vice president and manager of that company and Mr. Parker as treasurer. Mr. Peace was elected to fill all three of the vacated offices and already has assumed his duties. The officers of the Roanoke Mills Co. now are: **W. S. Parker**, president, which office he has held since the organization of the company in 1896; **S. T. Peace**, vice president, treasurer and manager; **J. M. Jackson**, secretary and **R. L. Towe**, assistant secretary.

A. S. Phillips, formerly chairman of the board of directors and vice president of the Phillips-Jones Corp., New York, has been elected president of the company succeeding **Max Phillips**, who has resigned. A. S. Phillips will continue as chairman of the board in addition to his new office. Max Phillips will remain a director and will continue to supervise the advertising of the firm.

T. S. Grayson, president, and **J. O. Hutchenson**, vice-president of the new Magnolia (Ark.) Cotton Mills Co., spent a few days in Greenville, S. C., recently in conference with members of the firm of J. E. Sirrine & Co., engineers for the Magnolia Company.

Merle Bell, president and treasurer of the Bell Co., Worcester, Mass., and Miss Frances Gordon, daughter of Albert A. Gordon, superintendent of the Crompton & Knowles Loom Works of that city, have recently become engaged.

H. S. Horrocks, H. Brinton Co., Philadelphia and Mrs. Horrocks, sailed from New York April 30 on the S. S. Samaria for England. They expect to be abroad for about six weeks during which time they plan to visit London, Paris, Switzerland, Holland and Scotland. They will sail for home on the *S. S. George Washington*.

Frank Senior, Sr., has resigned as president of the Rex Knitting Co., Little Falls, N. Y., under the reorganization of that concern.

William E. Mitchell, vice president in charge of operations of the Alabama Power Co., Birmingham, Ala., was elected vice president and general manager of the Georgia Power Co., at a meeting of the directors. He succeeds **W. H. Taylor**, who resigned to become vice president of the United Gas Improvement Co., Philadelphia.

"WILL LIVELONG" *or* "BOSS" WEBB?

Second only in importance to the problem of what to do with "Sesqui" profits, a question perplexing Philadelphians today is whether "Will Livelong" is or is not Chas. J. Webb?

For the benefit of the stay-at-homes, it should be explained that "Will Livelong" is the personage whose picture appears on the front of every car operated by the Philadelphia Transit Co. As an important part of that company's safety campaign, Mr. Livelong gives printed but pertinent advice to luckless jaywalkers of the Quaker City.

Pictured above, side by each, are Mr. Livelong and Mr. Webb. TEXTILE WORLD offers no prize for the first correct answer as to which is Will and which is Charles.

It might be added that Mr. Webb, while admitting the close resemblance, denies all kinship to Will Livelong. It might be added further, since space permits, that the "Boss" is in rather select company, as the P. R. T. gentleman has also been mistaken for George Bernard Shaw, Premier Poincare, Anatole France, and Joseph Pennel, the famous etcher.

P. S. Just before going to press, we learn that "Will Livelong" revealed himself as William F. Hogan, a civil engineer of Ardmore Park, Pa. However, the above is our story and we'll stick to it.

Randall N. Durfee, stylist for the Pepperell Mfg. Co., sailed from New York City last Saturday on the SS. Leviathan for a business trip in England, France and Germany. Mr. Durfee's efforts are largely confined to the development of new lines and styles for the fine count and specialty division of the Pepperell at Biddeford, Me.

George A. Boyd, who went from the Harmony Mills, Cohoes, N. Y., to the Appleton Co., Lowell, Mass., recently as assistant treasurer, has been elected treasurer of the latter company.

Frank H. Thomas, vice president of the Standard-Trump Bros. Machine Co., Wilmington, Del., was married Thursday, April 28, to Miss Margaret Butler of Baltimore. Mr. and Mrs. Thomas are now on a five weeks' honeymoon tour.

L. M. Graves, treasurer of the Phoenix Mills, Little Falls, N. Y., and **Judge Livingstone**, attorney for the company, were in Statesville, N. C., last week in conference with attorneys and directors of the Iredell Development Co., relative to the lease of the proposed site and other details preliminary to the removal of the mills from Little Falls to Statesville.

Thomas Tindle, formerly treasurer and buyer of the Majestic Knitting Mill Co., Topton, Pa., is now superintendent of the new Glory Knitters, Pottstown, Pa.

Charles D. Owen, Jr., has been appointed assistant treasurer of the Beacon Mfg. Co., New Bedford, Mass. This action was taken at a special meeting of stockholders of the corporation last Monday, at which time the by-laws were changed. The revision also provides for increase of the board of directors from six to seven, and a clause that the clerk and assistant treasurer of the corporation shall not be members of the board of directors unless elected to the board.

Hearn Swink, connected with the Patterson Mfg. Co., China Grove, N. C., was married on April 21, at St. Petersburg, Fla., to Miss Eleanor Landon, of that city.

H. D. Leinbach, who recently sold his hosiery mill known as the Wyomissing (Pa.) Knitting Mill, is now with the Berkshire Knitting Mills, Wyomissing, Pa., as inspector and examiner.

L. C. Sheehan, formerly purchasing agent of the Bibb Mfg. Co., Macon, Ga., has been transferred to the accounting department of this company.

M. L. Frost has been confined to his home at Jenkintown, Pa., for the last six weeks because of illness. He is now in the Abington (Pa.) Hospital, where he has undergone an operation. Mr. Frost has a host of friends throughout the knitting trades who will hope for his speedy recovery.

Edward T. Willson, Jr., employment and industrial relations director of the Forstmann & Huffmann Co., Passaic, N. J., was a guest at a banquet of the Overseers' Council of the Lancaster Mills, Clinton, Mass., which was held at the Sterling (Mass.) Inn on April 29. Mr. Willson was formerly service manager at the Lancaster Mills.

Chas. J. Webb, Chas. J. Webb & Sons Co., Inc., Philadelphia, and head of the Woolen Corp. of America, is on a business and pleasure trip through the far West, having recently spent several days in Denver. Reports that Mr. Webb was planning to start a woolen mill in that city are declared to be erroneous.

E. E. Blake, engineer from the Biddeford plant of Saco-Lowell Shops, has been visiting mills in the South with **Walter W. Gayle**, of Charlotte, N. C., southern agent for Saco-Lowell Shops. Mr. Blake has specialized on the development of long draft spinning.

John S. Bachman, superintendent of the Anchor Duck Mills, Rome, Ga., for the last seven years and connected with local textile mills for a period of 27 years, has resigned his position, effective May 1. He is succeeded by **B. G. Stumberg** of Tallassee, Ala. Mr. Bachman has not announced his plans for the future.

John A. Mellor, head designer at the Soule Mill, New Bedford, Mass., is to be the superintendent and head designer at the Page Mill of that city just as soon as the plant is formally turned over to the Kidder Co., which recently purchased the mill from the Gosnold Mills Corp. He will be associated with **Francis O. McDevitt**, recently appointed treasurer and agent of the corporation.

J. B. Parker has resigned as manufacturing superintendent of the Loray Division of the Manville Jenckes Co., Gastonia, N. C., and is now located at Macon, Ga.

J. W. Engle, who was superintendent of the Elmira Mills, Burlington, N. C., under the old management, is supervising operations at the plant, which recently started up after reorganization.

Charles W. McNealey, superintendent of the Cotton Mills Products Co., Natchez, Miss., has been transferred to a similar position in that company's plant at Mobile, Ala.

Albert Hartley has succeeded **W. Henry Ward** as superintendent of the Cranston Worsted Mills, Bristol, R. I.

George E. Kilburn, former superintendent of the Hopedale Mfg. Co., Milford, Mass., has taken a position in charge of the installation of machinery at the Smithco plant in that town.

E. S. Tramwell has been transferred from the position of superintendent of the Cotton Mills Products Co., Yazoo City, Miss., to a similar position in the company's plant at Natchez, Miss.

G. W. Hagan, formerly of Clover, S. C., has taken a position as superintendent of the plant of the Eastern Mfg. Co., Selma, N. C.

Frederick Arnold has been made superintendent of the Anderson Mills of the American Woolen Co., Skowhegan, Maine, succeeding Watson P. Schofield.

M. A. Pastor has been appointed designer for the Standard Knitting Co., Cleveland, Ohio.

George Carson, designer for the Webster Mills, American Woolen Co., Webster, Mass., has resigned his position with that company.

Moving Skeins, Raw Stock, and Cloth Rolls

Mechanical Material-Handling Systems Installed to Serve Series of Operations in Dyehouses, Bleach Houses, and Finishing Rooms—Production Materially Increased—Overhead Tramrail Conveyors Need Little Floor Space and Few Operators, and Leave Aisles Clear

*By M. G. Rosenthal**

MODERN material handling is not a fad or a hobby. It is one of the important factors entering into a consideration of future business success, and for this reason one should study the rudiments of its various qualities and apply them to his manufacturing routine. In the following paragraphs the application of modern material-handling equipment to the various operations of bleaching and dyeing are discussed, with particular emphasis placed upon the saving in time, hence the increasing of production and profits.

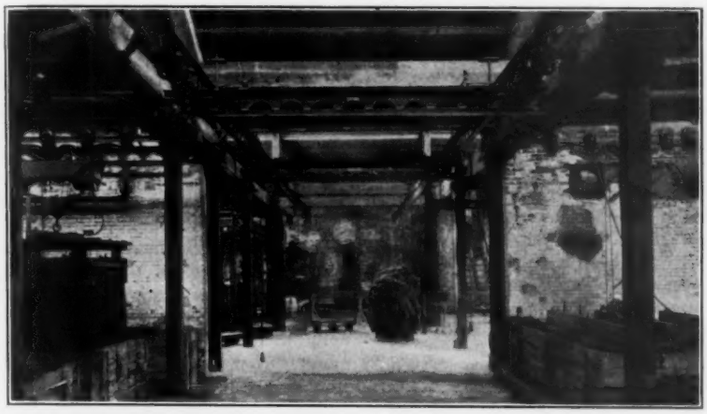


Fig. 1. Overhead Tramrail System for Skein Dyeing

Conveyors in Skein Dyehouse

Under this heading it may be well to point out some of the conditions met with and corrected. In most cases the greatest evil existed where only divided units of material-handling equipment were installed, so that the operation was confined to each individual dye vat. It is common to see a short length of I-beam track with a hoist carrier mounted on it over each dye vat to raise and lower the material. This is not a material-handling system, and gives far from the desired results. Had more units of mechanical material-handling equipment been combined to form a system serving a complete cycle of operations, the efficiency would have increased accordingly. Fig. 1 shows a tramrail system for skein dyeing that provides for complete material handling. This system is subject to the hardest kind of service, and the possibility of extreme steam and acid-fume conditions has been provided for.

The overhead system consists of a center-bay crane runway on which two transfer bridge cranes operate the full length of the room. The transfer bridges can be interlocked into the single rails running directly over the center of each dye vat. Fig. 2 shows a rack-load of skein yarn that has been hoisted from the dye vat and conveyed on to the transfer bridge by a single operator. He is pushing the load to the end of the room where it will be removed and extracted. A loaded rack of undyed skeins for the next batch will be picked up by the conveyor at the end of the crane runway where the racks are loaded and unloaded. (See background of Fig. 1.) In loading, one end of the rack frame is placed on a stationary railing with the opposite end on two portable

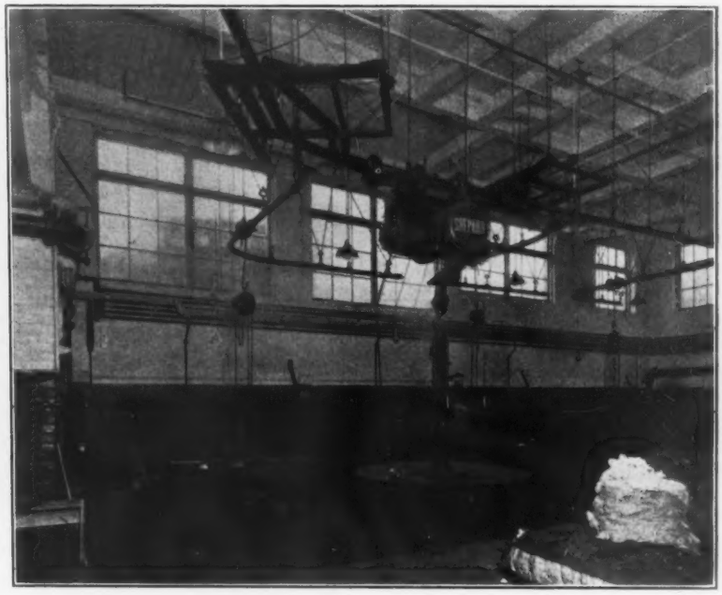


Fig. 3. Tramrail System Used With Raw Stock Dyeing Machines

Fig. 2. Rack of Skeins Being Conveyed to Extractor from Dye Vat

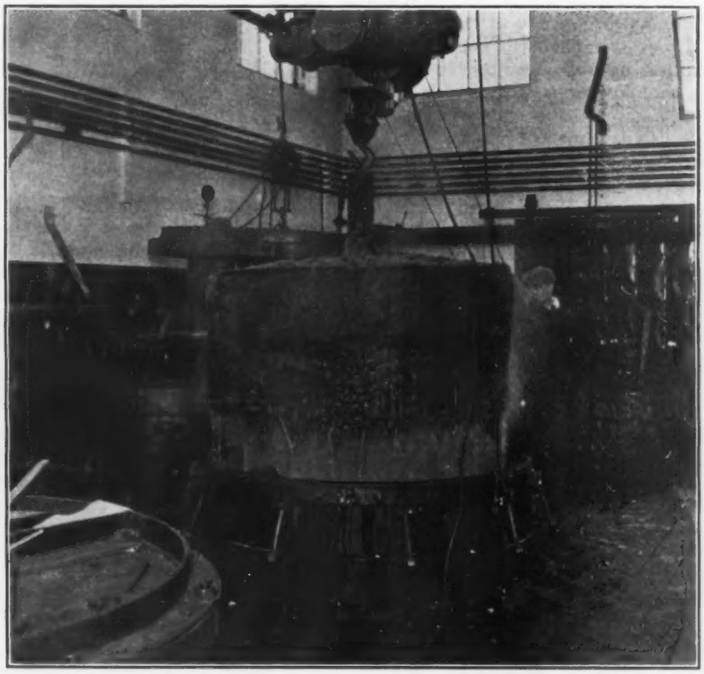


Fig. 4. Raw Stock Draining Over Dyeing Machine, Showing Manner in Which Whole Load Is Removed from Machine by Conveyor

* Textile Division, Cleveland Tramrail Co., Wickliffe, O.

Fig. 5. Roll Storage Room Where Rolls Are Brought by Conveyor Prior to Being Taken to the Calender Room

legs so that the various lengths of frames may be taken care of. The skein yarn is then put on poles and placed in the frame, which is made to hold any required amount of yarn up to 1,000 lbs.

The top half of the rack, which forms the closed cover for the dye vat, is next lowered on to the lower half holding the skeins by the twin-hook hoist, and the two are keyed together. The complete unit is hoisted and conveyed to the dye vat where it is lowered into position.

Perfect Two-Shade Work

An electric hoist unit like the one shown in Fig. 2 is a positive means of obtaining perfect two-shade work. A hoist of this type will not drift, regardless of how long it is to remain in one position. A desirable hoist speed is from 10 to 15 ft. per minute. It must be slow enough so that the operator will have perfect control in lowering the load of skeins into the bath to the required depth for two-shade dyeing. When the dyeing has been completed, the rack is hoisted, and the material is allowed to drain for a short time while the dye liquor is being replenished for the next batch.

The transfer bridge crane is locked into position for the removal of the load and the carrier is run on to it. The crane is unlocked, allowing the end safety fork to drop as a protection against derailment of the carrier, and the dyed load is then conveyed to the unloading rail at the end of the room, where the top half of the rack frame is transferred to a rack loaded with skeins to be dyed. The time consumed in unloading and replacing batches in a dye vat is but a few minutes. The fact that one or two extra lots per day may be treated in each dye vat makes the use of mechanical handling equipment profitable.

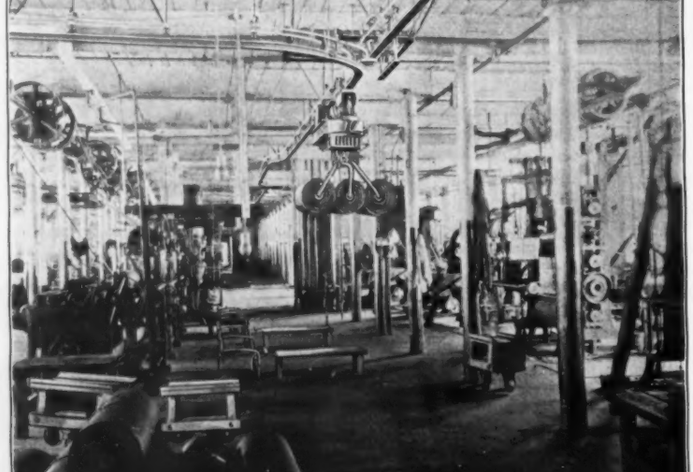


Fig. 6. Calender Room to Which Rolls Are Conveyed from Storeroom Shown in Fig. 5

This installation increased and improved production; first, by increasing the size of the unit load; second, by decreasing the time formerly required for changes; third, by making it possible to produce perfect two-shade dyeings by means of the electric hoist control. This system, according to data collected, paid for itself in less than six months in increased production and lowered labor costs alone. It also saved erecting a new building, for it was possible to place the dye vats closer together and thereby gain enough space for a few new vats.

Conveyors in Stock Dyeing

Figs. 3 and 4 show Franklin Process dye vats in combination with an overhead tramrail system. This installation is at the A. D. Ellis Co., Monson, Mass. In this dyehouse it was essential to have some form of lift-and-carry overhead system in order to remove the heavy kier cover as well as the two-ton load of dyed raw stock, by a single operator.

Each vat has a chain hoist with a hand-travel carrier for raising the kier cover and then moving it to one side. Fig. 3 shows the chain hoist suspended from the hand-travel trolley carrier which is located directly over the center of the vat in a position for the raising of the cover.

After the cover is raised, it is conveyed out of the range of the vat by pushing the trolley carrier around the sharp-radius curve and to the end of the rail which is located near the outer wall of the room. Fig. 4 shows the kier cover raised and out of range of the dyed raw stock which has been lifted by the two-ton electric hoist.

One hand-travel electric hoist serves all three vats. The main line of rail runs over the aisle, as shown in Fig. 3, between the vats and sacked wool stock. This main line has two switches so that the electric hoist carrier can be run over any one of the three vats and from the vats to the dryers. The extension to the dryers is not shown in the illustrations.

Suspended from the hook of the electric hoist carrier is the grab. This consists of a round perforated plate the same diameter as the vat, to which is fastened a perforated pipe with an eye bolt at the topmost position to receive the hoist hook. The bottom plate of the grab forms the bottom of the vat on which the raw stock to be dyed is packed. When the vat is filled with the desired amount of material the stock is weighted to keep it from floating. The cover of the kier is then placed in position by the chain hoist carrier and fastened down, after which the dyeing is proceeded with. After the stock has been dyed, the cover is removed and the entire load is raised by the electric hoist and allowed to drain for a few minutes before it is taken to the squeeze rolls and dryer. The dyed stock is shown draining in Fig. 4.

One of the greatest advantages of mechanical material handling in raw stock dyeing is the avoidance of the old method of forking out the matted stock after dyeing. The time consumed each day by several men in forking out the stock amounts to the time necessary to dye one or, in some cases, two batches. The three vats, combined with the tramrail system, produce more work with less men than would four vats without a material-handling system.

Regardless of the arrangement of vats, the flexibility of a tramrail system and its ability to convey around short curves, through doorways, and into other departments, make it adaptable to any dyehouse.

Roll-Handling Equipment

In finishing plants where piece goods are bleached, dyed, or printed, and then wound in roll form, there is much to be said about the desirability of material-handling equipment. The requirements again in this case call for equipment to serve a complete cycle of operations, in other words a complete conveying system.

Let us stop for a moment and make a comparison of internal dyehouse transportation costs to freight costs on the railroads. In order to reduce the cost of freight transportation, the same crew of men with a superheated

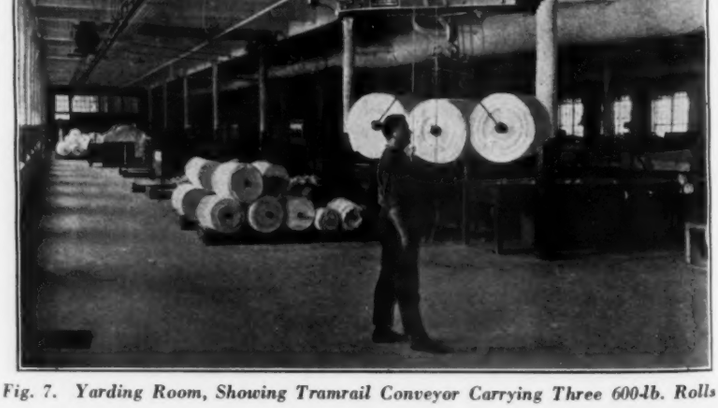


Fig. 7. Yarding Room, Showing Tramrail Conveyor Carrying Three 600-lb. Rolls

locomotive now transport double the tonnage formerly handled. More powerful equipment than man-power will do as much for the textile processor's internal transportation problem. His problem is as great as that of the railroad, and the cost per ton is many times greater.

To lower the cost of roll handling, we must first give consideration to increasing the size of the unit load (each roll), and, second, to increasing the number of units handled at one time. Of course we cannot do this with manual handling but some form of overhead material-handling equipment for lifting and carrying will allow both of these conditions to be met.

Figs. 5, 6, and 7 bring out many points which are advanced in favor of a lift-and-carry overhead conveying system for roll handling. The flexibility of a single rail switch system allows for any route of travel desired. Such a system also lowers floor maintenance cost, and allows rolls to be stacked to a good height in storage with but a single operator. Wide aisles are not required, since all equipment is hung from the ceiling and does not clutter up the aisles. The results from increased unit loads are longer machine runs with fewer stops; and quicker machine changes are possible with overhead tramrail conveying systems.

Fig. 5 shows a section of a roll-storage department where the rolls have been brought in from the roll-winder and placed in storage prior to being sent to the calender room. In the foreground is an electric-travel electric hoist carrier of floor control design from which three rolls are suspended. The special triple-hairpin hook grab allows the operator to pick up or release any roll singly. In this particular mill the rolls vary from 30 to 42 in. in width. The rolls are taken three at a time to the calender room (Fig. 6) either from storage or directly from the roll-winder, and are lowered on to a bench which is directly in front of the calender machine. This calender room, together with the storage room, requires only two conveying machine operators to do all the material handling, which required twelve men before the installation of the tramrail system.

Fig. 7 shows a one-ton conveyor unit in the foreground with three 600-lb. rolls being handled by a single operator. This installation serves the yarding department in a large New England mill. One operator handles all the work (about five million yards per week) from the storage room to the yarding machines. The former method was to handle one roll at a time on floor dollies, with the result that many rolls were soiled. After the conveying system was installed, the rolls were doubled in size and handled three at a time.

From these examples it will be seen that the greatest efficiency is obtained, not when a unit of mechanical material-handling equipment is installed to take care of a single operation in the dyehouse or bleach house, but when overhead conveyor equipment is laid out so as to form a material-handling system which serves a series or cycle of operations.

Constructing Southern Mills

Summary of Essentials and Recent Developments in Their Design and Construction—Cost of Various Types

By John A. McPherson

THE following gems of advice on the planning and constructing of mills for southern locations have been abstracted from a comprehensive paper read by John A. McPherson, of J. E. Sirrine & Co., at the meeting of the Construction Division of the American Society of Civil Engineers at Asheville, N. C., April 20 and 21.—*Editor.*

The building that best fulfills the requirements for the textile industry must embody in its design the following essential elements, a good site and location, strength, stiffness, and stability. The materials used should be durable and economical. Abundant light and ventilation must be provided. The hazard of fire should be minimized by proper subdivisions and controlling devices. Provision must be made for future expansion. Finally, the building should present a pleasing appearance.

Buildings for textile manufacturing should be set well out of the ground. Two to three feet is sufficiently deep for most locations.

Steel and reinforced concrete are gradually replacing timber in mill construction, and mills built today will principally embody these materials in their make-up.

Type of Construction

The standard practice in America today for the textile industry is quite usually confined to two general types of construction. These types are what are known as "mill construction" and "reinforced concrete." The term "mill construction" as understood today in the textile world signifies a structure composed of heavy timber or steel beams and girders, on which is superimposed a heavy plank decking. The columns supporting the beams may be either wood, cast-iron, or steel; the supporting walls of brick or concrete.

Reinforced concrete buildings are principally of the flat slab type in textile mills, although beam-and-slab or some modified form of beam-and-slab construction is occasionally used.

A one-story mill building with its floor resting directly on the ground provides the ideal building for a textile manufacturing plant of moderate size where land area is available and the topography suitable.

Any machine runs best on a solid, unyielding support.

The wide beam or girder spans so desirable under today's conditions can best be met by the use of steel or reinforced concrete. The square and round wooden columns are giving away rapidly to the cast-iron or steel columns. Cast-iron columns are now accepted by the principal underwriters without question, and even the unprotected steel columns are used and accepted with mild protest.

Practical methods for treating wood against decay have been devised and at costs which justify their use.

Story Heights

The problem of day-light in the multiple-story building is a factor of importance. The narrower the structure, the lower the story height can be. As 14 ft. is about the minimum height for best results, buildings under 75 to 80 ft. in width can use this height satisfactorily. The following story heights for buildings of various widths are recommended, and experience indicates that they are satisfactory: Widths up to 75 to 80 ft., 14 ft. floor to floor; up to 100 ft., 15 ft. floor to floor; up to 125 to 130 ft., 16 ft. floor to floor; and up to 150 to 160 ft., 18 ft. floor to floor. Multiple story structures wider than 160 ft. are not satisfactory for textile manufacturing. The story heights above apply particularly to standard beam-supported floors. Where flat slab reinforced concrete is used, a maximum of one foot can be deducted from the story heights above given and still maintain a good light ratio.

Roof insulation serves the triple purpose of preventing condensation and loss of heat in winter and insuring a cooler roof in summer. Under southern climatic conditions insulation is well worth its cost. Experience indicates that 1½ in. of cork for humidities of 60 to 70%, and 2 in. of cork for humidities of 80 to 90% are suitable and afford satisfactory operating conditions.

The high humidities in textile manufacturing and the steam and fumes in finishing processes are very destructive to many paints; and, to keep these surfaces looking best, special precaution must be taken to use materials suited to these conditions. Frequently it is advisable to merely prime the surface of green or treated lumber and freshly poured concrete work and then allow the surfaces to stand several months before a final paint finish is applied.

It has been demonstrated that, by the use of actinic and specially prepared glass in window and overhead sash, troublesome glare can be practically eliminated.

Buildings complying with the numerous underwriters' requirements, and equipped with the standard fire protection equipment are given insurance as low as 5 to 6c per hundred dollars. Where the construction embodies proper ties and anchorage the textile plants receive, in addition to the low insurance rates, tornado and windstorm coverage up to 25% of the amount of the fire insurance at no extra charge.

Concrete Construction

The use of wood for the top or working floors of mills constructed of concrete, which is very desirable for the fastening of machinery and also for the comfort of the operatives, is easily taken care of by spreading a layer of tarred sand 1½ in. thick over the concrete slab. On the tarred sand is embedded a deck of 2-in. plank, which in turn provides a nailing surface for the "top" or wearing floor. The 2-in. sub-floor plank thus laid can be advantageously used first in the "form" work; and in this way permits a large salvaging of the form materials.

Concrete construction provides an ideal operating floor for textile machinery, especially when the types of finished floors are as above described. The tarred sand and wood toppings provide sufficient cushion for good operation, and the rigid concrete slabs beneath this cushion support the long machines perfectly, and maintain their alignment. Looms operate very satisfactorily on concrete supporting slabs, and these machines can be installed on

TEXTILE BALANCE OF FOREIGN TRADE

EXPORTS

Manufactures of—	March, 1927	March, 1926	Three Months Ended— March, 1927	March, 1926
Cotton	$8,779,366	$9,764,031	$23,697,598	$28,117,837
Wool	335,636	352,648	908,816	943,088
Silk	1,270,341	1,870,633	3,399,357	4,525,185
Rayon	630,697	714,256	1,835,284	1,948,637
Jute, flax, hemp, etc	586,050	549,350	1,667,509	1,975,189
Total	11,602,090	13,250,918	31,508,564	37,509,936

IMPORTS

Manufactures of—				
Cotton	$5,095,907	$6,269,112	$14,363,890	$16,509,174
Wool	5,360,970	5,138,584	14,082,127	13,600,300
Silk	3,326,250	3,499,343	9,519,155	9,085,661
Rayon	1,897,403	1,840,311	4,261,018	4,176,393
Jute, flax, hemp, etc	10,918,688	16,430,042	32,555,176	44,851,888
Total	26,599,218	33,177,392	74,781,366	88,223,416
Excess of Imports over Exports	14,997,128	19,926,474	43,272,802	50,713,480

the upper floors without troublesome vibration to the building.

Greater opportunities for inferior workmanship are met in the concrete type of construction.

Bleaching, dyeing, and finishing work involves processes which are destructive to wood and steel. Concrete construction is decidedly the best for this class of work, as it permits the elimination of materials that are injured in the manufacturing processes. Galvanized steel window and monitor sash should be used in plants of this character and in places where an operation generates fumes injurious to concrete, the concrete surfaces should be painted with chemic resistive paints.

Attention to the ventilation by the manufacturer is important, for by its proper regulation the trouble with condensation can be remedied and the humidity condition suitably maintained. Keeping the mill cool in the summer months is a serious problem in the South, and this can only be achieved by medium of ventilation and humidity coupled with insulation on the roofs.

Wood floors and mastic floors admit of repairs more readily than concrete, and where heavy trucking is done they are preferable to cement floors.

Southern operatives are prejudiced against working on concrete floors, and their objections must be recognized if they are to be kept satisfied.

Comparison of Costs

Since the buildings represent a substantial part of the plant cost, it is important that the manufacturers obtain the maximum value of utility and use in their structures. The following are some average costs prevailing today in the South; these prices include heat, light, and fire protection: One-story daylight mill construction, using treated wood beams and planking and insulated roof costs $2.20 per square foot; one-story daylight reinforced concrete construction and insulated roof costs $2.50 per square foot; multiple story mill construction using steel beams and cast-iron columns with treated roof plank and insulation on roof costs $1.80 per square foot; and multiple story reinforced concrete construction with insulated roof costs $2.10 per square foot.

Music Week in Cone Mill Villages

GREENSBORO, N. C.—With A. S. Arnold as general chairman, plans are being perfected for the observance of Music Week in the mill villages of Proximity, Revolution, White Oak, and the Print works. The committee met on April 25 in the Proximity Y. W. C. A.

L. H. Bell is in charge of bands and orchestra; Misses Dawson and Chrutchfield, of schools; G. W. Beatty, of church choirs; Rev. T. V. Crouse, of sermons and talks.

The outline of plans for the week include band concerts, music night in each village, special musical programs at the school chapel period and programs of special numbers.

Protecting Mill Equipment

Requirements and Use of Rust-Preventing Paint—Preparations Used to Prevent Acid Corrosion

METAL-COVERING paints are becoming more important in textile mills day by day. Executives are realizing more and more the tremendous losses due to rust and corrosion, whether from moisture, water, acids, or other chemicals. Almost the sole function of a metal-covering paint is to prevent corrosion. In some cases it is also to prevent the rust stains from the metal getting upon the cloth, yarn, or other forms of textile products.

Generally speaking, unless the atmospheric conditions are very dry, the outsides of all metal tanks and vats, the iron frame-work of all machines, and all bare iron pipes should be painted. Textile machinery is usually painted green, gray, or black.

Requirements of Paint

Where wet processing work is done, and where there is steam or water dampness, every bit of exposed iron should be painted with a rust-preventing paint. Du Pont gives the requirements of a rust-preventing paint as follows:

(1) It must be chemically permanent.
(2) It must be chemically inert to iron.
(3) It must be impervious to air and moisture.
(4) It should be elastic, not brittle, and must not crack.
(5) It must be rust inhibitive.

Let us analyze these requirements in detail.

(1) The pigment and oil should have an affinity for each other, as red lead and oil.

(2) The paint should be a nonconductor, or better still, an insulator. Red lead is an insulator. Graphite, on the other hand, is a good conductor, and, if applied directly to iron or steel, tends to stimulate corrosion in the presence of any moisture by setting up local galvanic currents. Graphite and other forms of carbon pigments are very durable and resist water and moisture, but there should be an undercoat of insulating paint applied to the metal first. Graphite or carbon paint should never be applied to the bare metal. Again, no pigment should contain any oxidizing agent, for that will cause corrosion.

(3) and (4) need no further explanation.

(5) It is claimed that the best rust-inhibiting pigment for a first or priming coat is basic lead chromate—American Vermillion, as it is called. This is better than red lead. Red lead, litharge, white lead, and zinc oxide serve to check corrosion, while the basic lead chromate and zinc chromate prevent it. The neutral iron oxide pigments in linseed oil do not stimulate corrosion and are satisfactory where moisture conditions are not severe. Basic lead chromate may be used for the priming coat, and the second coat may be any other paint, with or without rust-preventing properties. Graphite or other carbon paints can be used for the second coat. It is claimed that linseed oil alone for the priming coat does not give as good results as when certain natural gums and resins are added in small amounts.

Remove Oil Film

Another type of preservative paint is the asphalt or asphaltum paint. Some of this paint is made from natural asphalt (Gilsonite), while in some the residue from oil stills is used for the raw material. Much of the oil residue paint is variable in quality and is unreliable, and therefore should be used only for rough outside work, such as cast-iron water pipe, heavy metal work, etc.

Galvanized metal is particularly difficult to paint satisfactorily. One school of practice recommends that the surface be washed with a solution of 8 oz. of copper acetate or copper sulphate to 1 gal. of water, and the solution be allowed to dry on. This treatment removes the oil film found on the sheets as they come from the mill, which, if left on, prevents the paint from adhering as it should. After the application of the copper salt solution, the usual metal paints can be safely applied. Some manufacturers claim that their paints can be applied directly to the metal without previous treatment.

A paint that is recommended for the coating of the insides of water tanks is 76% pigment and 24% vehicle. The pigment is 75% zinc dust or finely powdered zinc and 25% zinc oxide. The vehicle is 92% raw linseed oil, 4% thinner, and 4% drier.

All that has been written in regard to metal-covering paints applies to acid-resisting paints, with the addition that where there are acid or other chemical fumes or liquors besides moisture, special acid-resisting paints should be used. Such paints are usually black in color, although a red acid-resisting paint is made. Generally, if color is wanted, this is added as a second coat over the first coat of acid-resisting paint. The outside of all tanks holding acid or process liquors should be thus painted.

Enamels and Varnishes

An acid-proof varnish that is very good where color is not desired is on the market, and mills have used it as a vehicle for powdered aluminum. A great deal of dyehouse shafting is thus painted. The result is a thin film of metallic aluminum. The dye kettle manufacturers often paint the shaft and spiders of dye kettles with a prepared enamel to prevent acid action on the metal and stains on the cloth. Asphalt paint is used on the inside of bleaching vats to prevent stains. Bakelite varnishes are now being used widely for the protection of metals from acids and chemicals. Wood tanks holding dilute sulphuric liquors for carbonizing are heavily pitched, or else lined with lead. Bleaching kiers (iron) are, in many mills, whitewashed twice a year to prevent iron stains. A mill that had some high pressure filters painted the inside with high-priced, imported white enamel.

The subject of metal-covering and acid-resisting paints is a wide one and there are scores of paints obtainable, some being good and others not so good. Speaking in general, all metal outside surfaces should be painted. Corrosion must be stopped at whatever cost, but every case requires study and perhaps special treatment. As to the insides of tanks and vats, it all depends on the liquors. Non-acid liquors, as a rule, do not require that the containers be painted unless to prevent rust stains. Wood insides or outsides as a rule go unpainted. Metal outsides should always be painted, either with plain metal-covering paints or with acid-proof paints, as conditions require.

The textile industry, with its tens of millions of spindles, millions of looms and other machines, and miles of piping for water service, steam service, compressed air service, and process solution service, is very much interested in metal-covering and acid-resisting paints.

Chlorine on Wool

Scales on Fiber Destroyed—Holes Appear in Goods

"I noted with interest the article 'Chlorination of Wool' in the Nov. 6 issue of TEXTILE WORLD. It brought to mind immediately the subject of 'unshrinkable woolens,' and, since I have followed with interest the results of various experiments and methods for rendering wool goods unshrinkable, I should like to know the latest developments in regard to this."

The above inquiry was received by the Question and Answer Department of TEXTILE WORLD, and was answered by the following account of the results of some latest experiments:

At various times in the past, articles regarding the effect of chlorine on the shrinking properties of wool goods have been printed in TEXTILE WORLD. The general viewpoint expressed in these articles has been that the minute scales on the individual wool fiber are destroyed by the action of the chlorine, thus preventing the mass of fibers from felting and adhering to one another. Bearing out this theory, one of our English contemporaries declared a short time ago that recent investigations show that the scales are destroyed, thus exposing the soft inner portion of the fiber, which, during washing, is subjected to the action of the very mild alkalies present in soap, and is destroyed.

The increased tendency toward the appearance of holes in chlorinated goods after washing is explained by this. It was noted that if more than 50% of the fibers are found to have lost their scales, it is certain that the wearing qualities will be diminished and the resistance to washing decreased. It was stated, too, that the harshness which generally results from chlorination may be cut down by treatment with fatty acids or aluminum acetate or by soaping.

Preventing Damage to Card Clothing

Summary of Suggestions for the Care of Woolen and Worsted Card Clothing—Card Room Should Be Located in Upper Stories of Mill, Where Air Is Dry—Fillets Should Be Left in Room Several Hours Before Applied—Suitable Application and Grinding

NEW clothing is often damaged in the mill before it is ever put on a card or roll of any kind, simply because it is stored in a damp place, and the wires become rusty. If the wires do not become too rusty, the rust may possibly be removed with a little oil and waste. If the rust has started eating into the wire, that wire has a short life, as it will break out. The stock will not leave the wire very easily, but hang on to the rusty spots, making bad work. These broken wires will sometimes come through the card and lodge in the rings, making twitty roving.

A card room on the bottom floor of a mill will get more or less dampness, which will tend to rust the wire. It probably will not show up a great deal at the time, but when grinding it will be noticed that the wire begins to break out. When one comes to examine the cause, he will find that there is rust on the back of the wire. A card room should be up as many stories as possible in the mill, where the air is drier and the life of the wire is longer.

Rolls Out of True

Another cause for damage to clothing is rolls that are out of true. In such cases the wire runs closer to that of another roll in some place than it should, causing the wires of two rolls to touch, a fault that should never be allowed to occur. If a wooden roll is out of true, its clothing should be removed and the roll trued with the lathe and turning tool provided for this purpose. If a metal roll is sprung, it should be returned to the factory and fixed or exchanged for a new roll, if the damage cannot be remedied. Care should be taken to keep all bearings aligned and true; and, if they become worn, they should be bushed.

Effect of Temperature

Perfectly good fillets are often spoiled by being applied to cylinders and other rollers when they have not been in a room sufficiently long to have the same temperature as the room. The fillets should always be left in a room at least five or six hours before being applied. If these precautions are not observed, the fillets are apt to become loose if the temperature of the room is kept high, especially after they have been run a few years. If, on the other hand, the temperature of the room becomes very low, the wire in the fillet very often has a tendency to be harsh and rough; this is caused by the contraction of the fillet.

The remedy for these conditions is to keep the fillet in the room for at least the above-stated time or longer before using, and apply about 350 to 375 lbs. tension on the cylinder fillet when winding on the machine. Use a card mounting machine whenever one is available, as this is the easiest and most accurate way, and will prevent the spoiling of fillets due to being wound too tight or too loose. Caution must be used in cutting the tapers on the outside of the rolls.

Clothing kept in stock for replacement and emergency purposes should be stored in a room where the atmosphere is not too cold or too hot, too dry or too damp, as extremes in either are injurious to the wire as well as the foundation.

Extreme cold with a trace of moisture will cause rust on the wires and loss of flexibility to the foundation, whether it is flexifort or leather. On the other hand, extreme heat and dryness will cause the foundation to become hard and brittle. The ideal temperature and humidity for the storeroom is about 70 deg. F. and not over 60% relative humidity.

Application of Clothing

Some carders advocate the painting of cylinders and doffers before applying the clothing, claiming that the paint minimizes the effect of "rolling the fibers," due no doubt, to the effect of generated electricity from friction between crowns of wire and metal surface. They believe that this vibration weakens the temper of the wire, causing early breakage between knee and crown. One carder claims to have seen two standard set-ups of the same wire, in which case the painted cylinder was in use over 12 months after the unpainted cylinder had shown bald spots.

Clothing should be put on tight, but it should not be strained. Fancies are often spoiled by winding them too tight and grinding too hard. A fancy is a brush and should be treated as such. All clothing should be put on with an even tension.

Some carders believe that clothing should not be wound on with a twist in it, as clothing put on in this way is often damaged. One edge is pulled tighter than the other, causing the worker or cylinder to become ridgy.

When ordering clothing, it is of greatest importance to provide for clothing best suited for the work in process. Coarse wire will not do for fine merinos, nor will fine wire give satisfaction on carpet stock.

Extra heavy wire should bet set in an extra heavy foundation, and the wire should be set in moderately tight. Wire set too tight will not give the desired spring and is apt to rise in places when strong stock is carded. Wire set too loose will not hold the proper pitch, but will tip back when in operation.

In these days with so many different classes of stock, the ordering of clothing is a problem. The writer has found that No. 33 wire for the first breaker, No. 34 wire for the second breaker, and No. 35 wire for the finisher card work very well on standard woolen mill work.

A few months ago prizes were offered by the Davis & Furber Machine Co. for the best answers to certain important questions, including "What are the causes of damages to card clothing? Where and when do they occur? How can they be prevented?" A great many answers to these questions were received, and, taken together, they proved to be a valuable collection of information on the care of card clothing. Shortly after the close of the contest, the machinery company published a booklet, printing several of the prize-winning letters and also a general chapter largely summarizing the letters received. This chapter is reprinted herewith.

Tension

Clothing cards mean more than a gang of men going through set motions. Opposition is voiced to any winding or tension device that does not give a constantly uniform tension throughout the entire length of fillet. Man's physical and mental make-up varies so greatly under strain, that it is most certainly unreliable as a constant. Cylinders that stretch, then tear and damage every other roll, can in most cases be traced to mistakes in the application of the clothing, or to uneven tension. If the tension is uniform and sufficient, seldom will stretching and buckling occur. Every carder should know definitely the amount of tension for every grade of work.

Setting

Card clothing can be damaged very easily by setting the carding rollers too close. When the wires are so close that they come in actual contact with each other, they are pulled over backwards, the points are dulled, and the wires are loosened in the foundation. This is especially true on coarse, long wool. New clothing is required before any more fine work can be done on such a card.

Too close setting, particularly on the first cylinder where the stock is likely to be lumpy, will damage the wire beyond repair. No workers or doffers should be set close enough to the cylinders for any of them to lose point or position. If the stock cannot be sufficiently carded without apparent and rapid injury to the card clothing, the carding capacity of that set is not great enough and another cylinder should be added. Garnet breasts have added materially to the life of cards in such instances.

Grinding

Too much care cannot be taken in grinding new clothing, as usually the first grinding operation determines its life and efficiency. New clothing should be ground very gently to insure against too long a point and to prevent any possibility of hooks. If hooks are formed, especially on rings, they will not deliver the stock and regrinding is necessary. With other rolls this condition results in too much stripping, as the stock cannot be cleared out properly.

Another result of hard grinding is the overheating and consequent crystallization of the wires, which causes them to break out, necessitating replacements with the added cost of labor and material and loss of production.

Improper application and grinding are, perhaps, the chief causes for unsatisfactory results obtained with new card cloth. Grinding cannot be forced without serious harm to the wire. A 48 x 48 in. cylinder, if not "faced up" will require at least three to four hours of light grinding, whereas a 60 x 60 in. cylinder requires anywhere from six to eight hours, and, in many cases, to do a real good job it will require more.

Cylinders are ground at the speed they run in the card. Before commencing to grind, the cylinder clothing should be examined for deflected or crushed teeth. The crushed wires should be straightened up and all long wire clipped off. The wires should be cleaned of burrs, seeds, etc. Grinders should never be set into the wire so deep as to cause sparks. Hooks and fused points are the result, and the fibers are torn in the carding process.

Workers must not be run too fast in the grinding frame. While it is difficult to give a speed limit, due to the large variety and different thicknesses of the materials used for making worker rolls, it appears that 400 r.p.m. is a safe speed, at which the rolls remain balanced and can consequently be ground true.

Whether or not a roll is smooth and true can of course best be determined while the roll is in motion. Most carders rely on their sense of feeling to ascertain the condition of a roll. One of our friends relies entirely on his sense of sight. Looking along the surface of the revolving roll and finding that the roll shows an even, black surface from end to end, he

Well-Ask me Another -

QUESTIONS	ANSWERS
1. Why is it that our Fallers last such a long time without replacement?	1. *Because we use special analysis steel and our pins are the best obtainable.*
2. Why is it that a price established as fair and just by a number of Faller manufacturers, operating successfully for years, can be under-quoted?	2. *We'll let you use your own imagination.*
3. Why do our Fallers cost what they do?	3. *Because you are paying for exactly what you receive—the best.*
4. How can we guarantee satisfaction backed by our offer of free replacement?	4. *Because we know through years of experience that we are right and consequently our Fallers are right.*
5. Why are manufacturers buying our Fallers in preference to "cheaper" makes?	5. *Because they have confidence in us—that our Fallers are good and that our prices are just.*
6. Why are our Fallers a solid piece rather that a combination of tooled steel and cold rolled steel?	6. *Because in this way, and this way only, can they "stand up". We cannot afford to weaken their construction and our reputation through a cheap process.*
7. Why should you order Fallers from us?	7. *Because the leadership of forty years in this line guarantees our work to you.*

If you have any other questions, we will gladly answer them by wire, telephone, letter or personally.

See Also CONSOLIDATED TEXTILE CATALOG

ESTABLISHED 1885
R.H. HOOD CO.
INCORPORATED 1906

"If it's HOOD It's GOOD"

19th and Westmoreland Streets, Philadelphia, Pa.

considers the grinding job finished. The least sign of a light (white) spot shows that more grinding is necessary.

Grinding the Fancy

Fancy wire will gradually wear to a needle point, the time required depending on the size of the wire and the speed of the fancies. It is claimed that a needle point does not work well on a fancy, and that a chisel point is more suitable for the duties of the fancy rolls.

It is considered good policy to burnish the wires a little after grinding, using a hand card with fancy wire. The roll should be run at the speed for grinding. A hand card with the fancy wire pointing away from the operator should be used. The wire should be filled with wool, preferably of long staple, and the wool oiled. A few strokes back and forth will help much to make the wires smooth. Emery dust, remaining in the wires, is in this way removed and prevented from getting into the stock.

Strickling

Many carders believe in strickling after grinding, with either an emery block or a canvas strickle. Much can be said in favor of strickling. Besides cleaning the dirt out of the wires, a strickle makes the wires smoother and capable of better work.

If a hand strickle is used at all, only a thoroughly reliable worker should do the work. It is humanly impossible to control the pressure accurately over the entire width of the carding surface, and the benefit of strickling may easily be turned into a very harmful practice by grinding high and low spots into the fillet.

Grinding Wheels

A good type of grinder for woolen and worsted cards is the traverse grinder. It produces a true surface, good points, and does not grind too much of the wire away. Before grinding, the grinders should be tested to see if they run true, and to make sure that the grinder is in perfect alignment with the cylinder to be ground. If out of line, it will grind the cylinder low in the center. The tube of the grinder furnishes a reliable shaft for the alignment.

Care should be taken in selecting the size of emery to be used and the wheel should be examined after every grinding, to ascertain if replacement of the emery may be necessary. Sharp, clean emery in light contact with the wire, will produce a sharp, clear hissing sound. In setting the grinder, the operator depends on his sound to secure the right amount of cutting. Worn emery cannot produce the proper sound, and there is always the danger that the grinder may be set too hard against the wire.

Many carders use No. 8 Turkish emery with very satisfactory results. If emery of too fine a grain is used, the points of the wire will be too flat, or chisel shaped; and, if too coarse a size of emery is used, too long a point may result that is easily hooked.

To make a perfectly true grinding wheel, one carder covers the pulley with leather, and turns the leather down to make it absolutely true. Emery fillet is then glued to the leather surface. In this way he always has perfectly true grinders.

The surface speed of grinding wheels should be about 1200 ft. per minute.

Carbonized Stock

One of the outstanding causes of damaged card clothing is carbonized stock. The damage is caused by stock that has not been properly neutralized, as the acid takes its toll of the delicate card wire. The finisher wire suffers most, being finer. The wire breaks off between the knee and point, usually about 1/32 in. from the point. No. 35 wire appears to break more readily, and some carders use, therefore, No. 34, which they claim to be fine enough on the finisher card for all classes of woolens. Where a thin emulsion is used on the stock, the acid will do much damage, and, if the card is allowed to stand a day or two after such stock has been running on it, the damage will be considerable. It is far better to spend a little more money in neutralizing carbonized stock than to damage hundreds of dollars worth of card clothing, not to mention the poor work that results from such clothing.

Oil

Wool stock oil should receive more attention from the mill man. Carders know that the acid in some stock oils not only rusts and eats the card wire, but hurts the foundation as well.

Wool oil that has been reclaimed from wool scouring plants may cause a great deal of trouble in the card room, due to the presence of a certain percentage of alkali and sulphuric acid. When such oil is used on the stock in the picker room, these harmful ingredients in the wool oil will cause the wire to pit, and the points of the wire will break off.

Overloading Card

Overloading a card is very hard on the card clothing. Speed up your doffers.

A metallic breast is of great benefit to a card and prolongs the life of the wire greatly. A metallic breast will pay for itself in its saving of clothing within a short time, as it opens and cleans the stock, and takes a great deal of the strain from the wire.

Crowding the card with too much stock also helps to shorten the life of the wire. The more stock there is in the card, the greater the strain on the wire. Flexifort is superior to leather for covering cylinders, doffers, workers, strippers, and tumblers, as it is stronger and gives a better foundation to the wire, and, of course, is cheaper. Leather is best for fancies, as it leaves the wire soft and springy and does not stiffen it as flexifort would.

Stripping

Running the card too long without stripping is another factor contributing to early destruction of the wire. In such cases the strip is pounded into the wire, straining and loosening it in the foundation. It also causes high and uneven wire, making more grinding necessary. Ring doffers receive this treatment more frequently than the rest of the card. In some cases they are run for weeks without being stripped, causing them to have high and uneven wire and to get spongy. Such doffers are useless as far as good work is concerned. The card clothing manufacturer is then usually blamed for a poor grade of card clothing, when—as in most cases—the real trouble is in careless operation in the mill.

If a card is to be left standing for an indefinite period, it should not be stripped, as the strip protects the wire and prevents it from rusting. If possible, the card should be run for a short while daily, or it should at least be turned by hand.

Many rolls of card wire have been badly damaged by carelessly opening and closing packing cases, allowing jagged nails to pierce the clothing. This can easily be remedied by making an order in any one number of wire large enough to justify the use of a reel box.

Notes

Good fillets are very often damaged by workers and strippers that have been put back into the card improperly after stripping. Sometimes the operators will turn the bearings upside down, allowing the points of the wire to come in contact with the cylinder, so that damage is done to both cylinder and workers. Grinding is the only remedy.

Whenever a card is down being stripped, the strippers should always look the belts over carefully. Weak and worn places in the belt that are apt to break during operation should be repaired before the card is started up again. If a belt breaks while the card is in motion, and that belt should happen to be thrown into the card, as they very often are, many dollars worth of card clothing is damaged—to say nothing of the other damage to the castings and rolls. Such losses can be prevented by just a little ordinary care on the part of the worker.

Allowing cards covered with clothing to stand too long without using will cause the wires to become rusty from the moisture in the air, and when in use again the wire will break off wherever the rust has started.

Taking Static Out of Industry

Its Neutralizing as Great a Benefit to Industry as Would Be Eliminating of Static for the Radio

By John A. Davis

ALTHOUGH "static" is a new word to nine out of ten of those who use it so commonly nowadays in connection with radio reception, it is the unforgettable name of a formidable old enemy in some of our great essential industries including textiles. Static electricity was only too well known during the latter half of the last century in wool, cotton and silk mills, printing pressrooms, paper mills, and factories for making various paper products, as well as in other trades. It meant something more than interference with comfort and pleasure. The costs it entailed in the lost time of workmen and the lessening of the output of machines, besides the spoiling of materials, ran into vast sums of money, said to be millions of dollars.

As time progressed and new and faster machines were introduced the static evil grew worse instead of better. Such were the conditions that prevailed for many years. Inventive minds had brought forth machines. Mathematical, engineering and mechanical — yes, electrical — problems were being mastered, but here was a natural puzzle that long held genius in its clutches.

Life-Work Begun in Boyhood

"Willie" Chapman was just sixteen years old when he made the discovery that led to the invention which has freed industry from the costly interference of "static."

William H. Chapman is today the active head and general manager of the Chapman Electric Neutralizer Co., Portland, Me., a corporation named for him and his invention. Although beyond the age when many men of his means retire from business, Mr. Chapman does a day's work every business day about ten months of the year at the executive offices of the company. He also finds time for study and experiment in the laboratory of his plant, delving into the mysteries of electricity and searching for new facts in a field in which he is a recognized discoverer.

Boy Scientist and His Laboratory

As a youth the effect of atmospheric electricity on pith-balls and electrometer was the object of his daily observations in clear weather, and his constant study during thunder showers. When a neutral condition prevailed in the atmosphere the pith-balls hung lifelessly; under the influence of electricity they were seen to move apart. The electrometer told the boy Chapman that both positive and negative charges of electricity were at work. His observations consisted of measuring these separations and accurately charting each movement, positive and negative.

Pith-Balls and Amber Pipe Stems

The boy's constant study and observation resulted in the Chapman discovery; namely, that friction or pressure which had long been known to cause electrical charges to appear in amber, glass, paper, wool, cotton and silk fibers, showed the same influence on these materials that atmospheric, or static electricity had on the pith-balls. Moreover, it revealed the natural law of atmospheric electricity which causes attraction between opposite charges and repulsion between those of the same kind.

Who has not seen the amber stem of a tobacco pipe put to the test of

Conduit Threading Banished!

WHAT price conduit installation in your mill? Conduit threading is at best a costly and toilsome operation. Every curve in the conduit exacts its toll in labor —in ***time.***

Kondu Box, the ***threadless*** conduit fitting reduces conduit installation to its simplest terms. You merely cut the length of conduit desired—ream off burr inside, set into bushing, tighten with lock-nut—and the job is done. Removal or replacement is equally simple.

Lift the conduit threading load from your mechanical department—***from your pocketbook!*** More men in industry all the time are turning to Kondu-Box—and saving valuable labor and time.

Examine the Kondu-Box. A sample fitting is yours for the asking. No obligation whatever.

ERIE MALLEABLE IRON CO.
KONDU DIV. ERIE, PA.
OFFICES IN PRINCIPAL CITIES

KONDU-BOX

REGISTERED U. S. PATENT OFFICE—REGISTERED IN CANADA

THE THREADLESS CONDUIT FITTING

being rubbed up and down a skeptical buyer's coat sleeve? If, after that, it picks up a piece of paper it is pronounced amber. If it doesn't, it is scorned as spurious. As in the case of the pipe stem subjected to friction, the electricity causes these products to attract dust, small bits of paper and other light objects. This is exactly what takes place on certain machines in cotton and woolen mills, also on paper making machines, paper rollers and printing presses. In passing through the machines friction or pressure disturbs the neutral condition of the material and it becomes electrified.

Static Interference in Woolen Mills

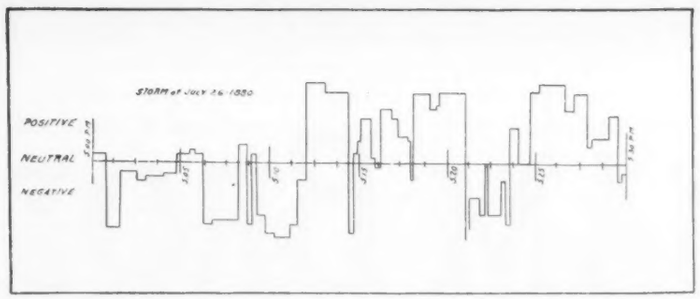
In the textile industries it is not uncommon for the established or expected output of certain machines to be hampered on Monday mornings in cold weather, after standing a day or more in the subnormal temperature maintained in the plant over Sundays or holidays. Not until the rooms and machines are thoroughly warmed up does production really get under way. While charged with static electricity the fibers are bewitched with mutual repulsion—pushed apart by the invisible foe, resulting in soft spots in the yarn and making uniform work impossible in subsequent processes.

In woolen mills, frictional electricity is constantly generated by the pressure of rolls and by friction on the fibers. On finisher cards it causes the roving to stick to the rub-rolls, break and wind up in the rub. This waste and loss of production is attended by impairment of quality by reason of the replusion between individual fibers when an electrical charge is present. Because of this repulsion, the fibers do not lie close together and parallel as they would if neutral. Some of the ends are pushed out and thus they remain during the subsequent processes, refusing to be gathered in when spun. And those fibers which do lie parallel throughout are under a tension that makes them offer a strong resistance to spinning, resulting in soft spots in the yarn and considerable unevenness.

The Direct Cause of Cotton "Fly"

In cotton carding, when fibers become charged, the electricity is manifest in the doffing. Here the normal, smooth operation of the card is interrupted by the annoying tendency of the web when stripped off to roll up under the comb, or to hop over it back onto the doffer, and the edges of the web to swing out and cling to the comb shaft journal boxes. These actions are caused by static electricity, and never occur if the cotton is electrically neutral.

Static electricity, as the name implies, is electricity at rest, as distinguished from dynamic electricity, or electricity that flows. Understanding the simple natural laws of the former kind, it is easy to see why the thin film of cotton leaving the doffer should throw off "fly" and break apart. This is due to the mutual repulsion between fibers. On the other hand, mutual attraction between the fibers and the metal parts of the card



A Boy's Chart of a Thunder Storm: This chart, made by William H. Chapman when he was a boy, gives an accurate reading of the atmospheric electricity that existed during a thunder storm on July 26, 1880. The horizontal line through the center represents "neutral;" the up-and-down lines, with their connections, show the course of the static charges darting up and down between positive and negative.

tends to break down the web. Either of these forces would be bad enough, but both are generally active at the same time causing the difficulties so familiar to cotton carders.

It is a very common experience during cold, dry weather, to have drawing frames running on bleached or colored stock deliver a sliver more or less "alive" with electricity, developed by the pressure on the cotton fibers between the rolls, and by rubbing of the fibers against each other, due to the drawing.

No other textile material is so susceptible to acquiring charges of static electricity as silk. No other will retain it as long, especially on silk warping and silk carding machines.

How Other Industries Suffer

In paper mills, friction in the product is like electricity in the amber pipe stem. By picking up dust it detracts from the perfection of the product. Steam jets, vapor pots and other devices had all been tried, but while they gave some measure of relief they did not get at the root of the trouble.

Rubber manufacturers formerly feared frictional electricity as something more than a deterrent to quality and output—it was a constant fire menace. Indeed, many disastrous fires had been caused by sparks of this form of electricity igniting naphtha. A similar danger exists in naphtha cleaning operations.

Up to a generation ago frictional electricity tried men's souls in printing pressrooms. With sheets sticking together like the proverbial thieves, the wet ink on the face of one came off on the back of the next, causing what printers term "offset," a grievous deterrent to quality and the cause of untold losses, especially in cold weather.

At Last Static Is Conquered

William H. Chapman never relaxed in his study of electricity even while a student of Williams College, which is located in the town of his boyhood home. After graduation his interest in the subject was so ingrained that he took up electricity as his life work. The invention of the electric neutralizer was the work of his mature manhood, but it rested fundamentally and absolutely on the discoveries made in his boyhood days down on the farm.

Many years later, in 1904, while working on some electric motors which the Continental Paper Bag Company had sent him for repairs, Chapman received a letter from that concern bearing the information that the production of their automatic bag machines was greatly curtailed by frictional electricity which caused the bags to stick together. It was so bad that a machine designed and built to produce 300 bags a minute could not be made to deliver at a rate of more than 100.

First Chapman Neutralizer

The real situation registered instantly on Chapman's mind. His solution was ready. It had been ready all these years waiting to be called to its service.

Within five minutes he had brought forth his invention and demonstrated its value, completely neutralizing some electrified paper. This was accomplished by bringing the paper within radiating range of a high tension, high frequency coil of wire which he happened to have in his office at the time. He had made that coil several years before for the sole purpose of giving certain spectacular electrical demonstrations in a lecture before the Portland Y. M. C. A., little suspecting that it would serve him in an invention of moment to the world.

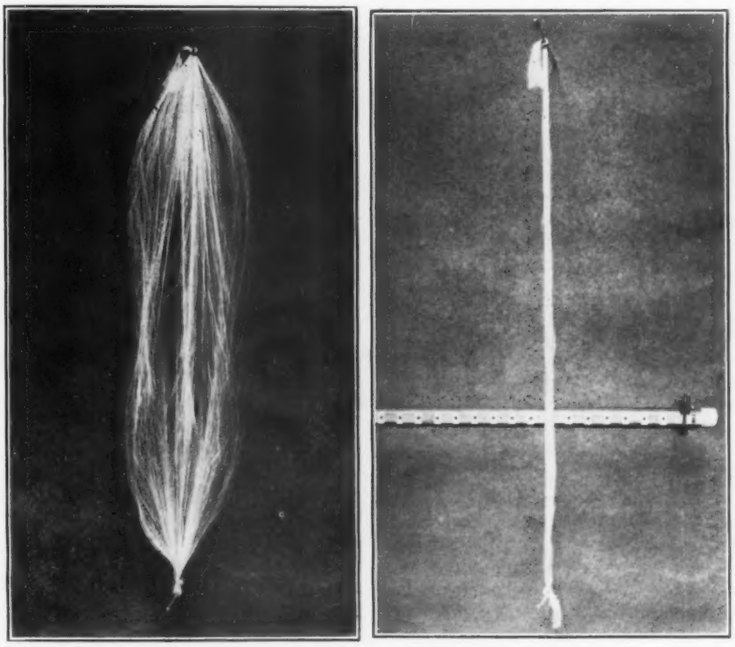
He constructed a similar coil of smaller size and took it to the bag mill. Placing it by the side of one of the bag machines, he inserted an extension plug into a nearby lamp socket. Two girls were operating the machine and it was as much as they could do to get the finished bags out of the machine and into a smooth pile even at the slow speed at which the machine was running.

Without stopping the machine, Chapman simply pointed the terminal wire of this coil toward the bags. Presto! Immediately the machine began to deliver smooth piles of bags without the help of the girls. They looked up and smiled. Thousands of other workers and their employers, too, have had good reason to smile since that day. And William H. Chapman has smiled with them. The terminal wire was then strapped fast to the machine and the speed was increased three-fold. The problem of rapid production was completely solved. The Chapman electric neutralizer had conquered a menace to production and quality in the bag industry as it has continued to do in many other trades ever since.

Electrical Solution

The neutralizer worked because it was an electrical apparatus scientifi-

(*Continued on page 93*)



Taking Static Out of Silk: A Skein of Silk Showing the Effect of Frictional Electricity and Its Instant Disappearance After Being Treated by the Chapman Electric Neutralizer. Skein at Left Shows Effect of Static Charge. At Right, the Same Skein After Static Had Been Killed by Chapman Inductor Bar.

GRAHAM BROTHERS TRUCKS

$670
¾-Ton Chassis F. O. B. Detroit

$1245
1½-Ton Chassis F. O. B. Detroit

$885
1-Ton Chassis F. O. B. Detroit

$1445
2-Ton Chassis F. O. B. Detroit
Dual Rear Wheels Optional at Same Price

Quality—

Volume—

They Are Good
67,293
were sold last year

Low Price

SOLD BY DODGE BROTHERS DEALERS EVERYWHERE

Lubrication of Boiler Plant Machinery

Tube Cleaners, Coal and Ash Handling Equipment, Economizers, Blowers, and Fans All Require Attention to Reduce Frictional Wear and Maintain Efficiency—Construction of Machinery Governs Type of Lubricant Required—Viscosity of Oils and Greases Suitable for Use

*From "Lubricant"**

THE problem of properly maintaining the lubrication of such boiler plant equipment as coal and ash-handling mechanisms is ever before the mechanical superintendent. The essential points to guard against are neglect and a disregard for the importance of lubrication. The presence of considerable amounts of dust, together with the fact that in many cases the wearing elements will be exposed enough to permit of the entrance of sufficient abrasive matter to cause appreciable wear, makes it of vital importance that oiling or greasing be carried out regularly and thoroughly. Other equipment, such as tube cleaners, economizers, blowers, and fans, are discussed from the lubrication angle in the accompanying article.

As can be expected, tools used to remove scale from the inside of boiler tubes by high-speed rotary or vibratory motion will require lubrication in order to minimize the power-reducing and wearing effects of friction. In this connection the steam or air operated cleaner will require careful consideration. In the water or hydraulic power cleaner the turbine is water lubricated, the wearing elements being thereby effectively protected against frictional wear.

The wearing elements of the vibratory cleaner are perhaps somewhat more complex, from the viewpoint of lubrication, than those of the rotary cleaner. With the exception of the ball and socket they will, in general, receive adequate lubrication if the steam or air is charged with sufficient oil.

The ball and socket, however, does not receive the necessary amount of oil from the intake or nozzle end of the cleaner. It must, therefore, be independently lubricated by means of an oilcan, approximately a tablespoonful of oil being squirted in from the hammer end at ten minute intervals during operation. If this precaution is not taken, the ball will tend to wear rapidly, in consequence striking against the socket at every stroke, causing further wear and ultimate breakage.

Other wearing parts, as mentioned, will receive adequate lubrication provided the air or steam is properly lubricated. To bring this about, a suitable sight-feed lubricator is attached to the supply line. If such a lubricator is not used, it will be necessary to oil by hand, applying about a tablespoonful every three to five minutes at the nozzle or intake end of the cleaner, according to whether compressed air or steam is being used.

In tube cleaners of this type, lubrication of motor or turbine bearings is essentially a problem of maintaining an adequate film of suitable oil between the rapidly rotating shaft of the rotor and its supporting bearings. Adequate impregnation or lubrication of the steam or air as it passes through the cleaner will bring about the desired results, just as mentioned above in the case of the vibratory cleaner.

A very effective method of not only delivering oil to the tool but also protecting the hose from deterioration (by preventing contact with oil), is to run the oil line from the lubricator within the operating hose directly to the cleaner. When starting such a cleaner, a small amount of oil should be poured in prior to connection to the operating hose, in order to insure lubrication of the bearings until the lubricator is functioning properly and delivering the necessary supply.

Oils to Use

In selecting oils for tube cleaner lubrication it will be necessary to consider whether air or steam is used as the motive power. A pneumatic cleaner will require a relatively light-bodied straight mineral oil of approximately 200 sec. Saybolt viscosity at 100 deg. F.

Where steam power is used, it will be necessary to resort to a compounded steam cylinder oil. In practically every case the steam employed in such a device will contain more or less moisture. A certain amount of emulsifiable animal fat or fixed oil will, therefore, be necessary to give the requisite tenacity or adhesive ability to the oil film. The base of such an oil should be a steam refined cylinder stock, the viscosity of the ultimate product being in the neighborhood of 130 sec. Saybolt at 210 deg. F.

Whatever the motive power or grade of oil required, it is important to remember that to effectively preserve tube cleaners and prevent rust, they should be immersed in oil when not in use.

Handling Equipment

The present discussion will deal solely with such handling equipment as is located under cover and directly adjacent to the boilers. In consequence, it will cover tramrail conveyors, etc., for handling coal and ashes; traveling weighing hoppers, ash hoppers and gates, and skip hoists for ash transfer to railroad cars, trucks, etc., for removal.

In the operation of any of this equipment the essential points to guard against will be neglect, and disregard for the importance of lubrication. As a rule, there will be a considerable amount of dust present, and, in many cases, the wearing elements will be exposed to a sufficient extent to permit of entry of enough abrasive foreign matter to cause considerable wear. This will be especially true on certain apron, belt, or chain conveyor roll bearings. For this reason some builders have made special effort to design their equipment of as nearly oil and dust-tight a nature as possible.

Both grease and oil are acceptable lubricants, according to the design of such parts. The carrier roller, for example, requires oil, a suitable wick being used as a distributor. In such a device a straight mineral oil of from 200 to 300 sec. Saybolt viscosity at 100 deg. F. will be satisfactory. In general, such an oil will also be adaptable for the lubrication of the driving motor bearings of either ring oiled or anti-friction type, provided that the housings will retain oil, and that temperature conditions are not abnormal.

Other types of conveyor rollers will be designed for grease lubrication, being equipped either with compression cups or pressure grease fittings. Unless the bearings of such rollers are relatively dust-proof, grease will be the more satisfactory lubricant, for it will serve as an effective seal at the rims of the bearings to prevent entry of dirt or dust. The usual procedure in lubricating such rollers is to screw down the compression cup tops, or continue to force in grease with the pressure gun until there is a slight efflux at the edges of the bearings.

Under higher temperature conditions a relatively high melting point grease, as used on certain of the stoker bearings, should be used for this purpose. Normally, however, a medium bodied compression cup grease will give satisfactory results.

Wire Rope Lubrication

When the tramrail or other modifications of the traveling crane are employed, or where skip hoists are involved, wire rope preservation and lubrication must also be given careful consideration. On the skip hoist, especially, will this be true, due to the possibility of exposure to the weather, and the subsequent occurrence of rusting and corrosion. Within the boiler plant, as for example in the case of a tramrail and hoist installation, the presence of more or less dust and dirt will involve the most serious problem.

In general, a wire rope lubricant, to be capable of effectively penetrating to the core and resaturating it, as well as serving as a protective medium against corrosion, should be a straight mineral product of a viscosity of approximately 1,000 sec. Saybolt at 210° F.

Ashes can be variously handled by means of gravity, pneumatic pressure, traveling conveyors, larries, etc. In many plants gravity, by reason of economy of equipment involved, is extensively used. The necessary chutes and hoppers are rugged, have no wearing elements except the gates, and can frequently be readily located to discharge directly to carts, trucks, ash larries, or railway cars.

Ash gates, however, will require individual discussion. They are subject to severe service, their wearing elements are close to the ash being handled, and they frequently are exposed to relatively high temperatures, especially if quenching has not been thorough.

In general, they will be of the pivoted or roller type. While many pivot ash gate installations may be hand operated, power control by means of steam, air, hydraulic or oil pressure is advantageous for both types, especially in larger installations.

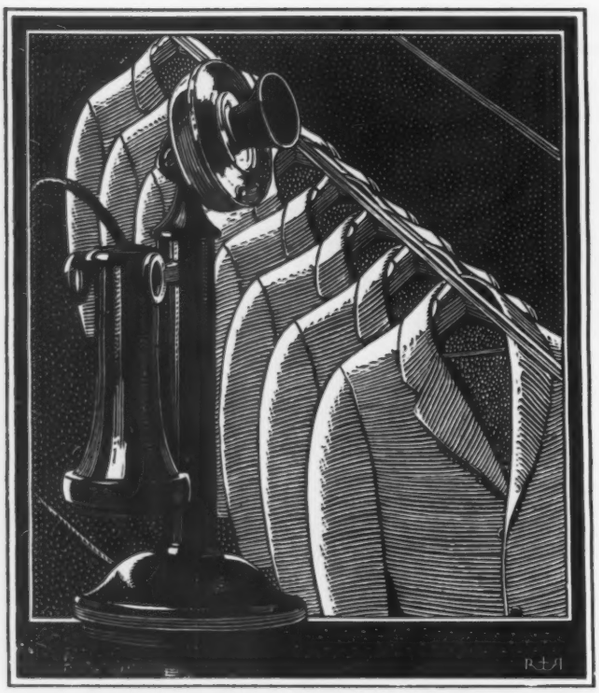
In the power operated gate, steam or air cylinder lubrication is a factor, although if suitable lubricants are used there will be but little chance of difficulty or abnormal wear occurring. As a rule, steam cylinder or air compressor cylinder oils, as used elsewhere in the plant, are quite adaptable to the cylinders of ash gate installations. Periodic application by means of a suitable mechanical force-feed lubricator or oil cup is all that is necessary, the amount of oil delivered to the steam or air per minute being approximately the same as that which would be fed to the cylinders of the average reciprocating steam engine or air compressor in the power plant.

Hydraulic installations, of course, require no provision for cylinder lubrication, water or oil serving this purpose admirably. Pivot bearings, which carry the pins in pivot-type gates, and those of the rollers which support the gates in roller installations, are generally designed for grease lubrication. Pressures are relatively high, frequently there is considerable dust present, and temperatures may also be abnormal.

Pressure grease lubrication by means of a high grade, carefully compounded grease of medium consistency will effectively meet the above conditions. Grease is an especially advan-

*Publication of the Texas Co.

Why not call them up *Long Distance* order more



A MADISON, WISCONSIN, clothier found that he was having a run on a special suit of collegiate type. He called the Chicago manufacturer on Thursday morning. Eight suits arrived on Friday. The entire lot was disposed of Saturday. "Had it not been for the telephone," he writes, "we would not have been able to satisfy the demand for a week-end business so profitable to us."

FROM ALL PARTS of the country comes similar news. From Wheeling, West Virginia: "A tremendous demand for slickers caused us to save many sales that would have been lost had we not used the long distance telephone to secure immediate shipments." Louisville, Kentucky: "We use Long Distance for making purchases . . . for hurrying along information and shipments. . . . In many cases it has saved us trips to market." Rochelle, Illinois: " . . . not a week goes by but we use Long Distance to take care of rush orders. . . . The only satisfactory way." Cincinnati: "Long Distance in our case is just as important as the local telephone."

There's scarcely a business in this country that could not use long distance calls to cut costs, save trips and get needed goods. They'll nearly always cost less than you think. . . . *Number, please?*

BELL LONG DISTANCE SERVICE

tageous lubricant where more or less of a seal is desired at exposed bearing ends, inasmuch as it prevents dust or other abrasive foreign matter from penetrating to the clearance spaces.

The Economizer

Care and upkeep of economizer equipment develops into a relatively small matter provided lubrication of the component parts is properly attended to; on the other hand, neglect or careless selection and use of lubricants may result in serious troubles which will materially affect plant efficiency and fuel economy if the economizer must be cut out of service.

The lubrication requirements of economizers are confined solely to the scraper driving mechanism, and to the mechanical draft fan and engine if such are installed. They are not unique, nor do they involve details beyond the ability of the average boiler plant operator to handle. The problem is simply a matter of common sense, and appreciation of the fact that lubrication of all moving parts must be maintained, and inspection made frequently and periodically. The high temperatures usually prevalent in economizer housings, and the fact that the lubricants in service are continually exposed to these temperatures as well as to dust, dirt, and possibly atmospheric conditions, cause lubricating qualities to naturally deteriorate more rapidly than usual.

Neglect of lubrication of economizer motors, driving gears, reversing mechanisms, chains, shaft bearings, etc., will therefore be productive of serious consequences. Probably the results would be the ultimate burning out of the motor, shaft, or engine bearings, or such excessive wear of the gears and driving chains that slipping or breaking might occur.

Relative to the grades of lubricants required for economizer operation, it is safe to say that usually three or four will cover the conditions. Lubrication of motor bearings is similar to usual practice for such equipment in general.

For ring-oiled bearings, a medium viscosity, straight mineral oil of from 180 to 300 sec. Saybolt at 100° F. will meet normal operating conditions. Under excessively high temperature, however, it might be necessary to use a somewhat heavier oil.

Where ball or roller bearings are involved, either oil or grease can be used, according to constructional conditions. Oil should be employed wherever it can be successfully retained in the bearing and housing. Frequently, however, there will be a possibility of oil leakage, or dust, dirt, and water conditions will be so serious as to render grease lubrication advisable.

In general, oils for such bearings should be light, commensurate of course with the pressures and temperatures involved. Usually a viscosity of from 100 to 200 sec. Saybolt at 100° F. will be satisfactory, the oil of course being a straight mineral product of high refinement.

Oil Level Important

The level of the oil in such a bearing is important. The fact that the oil serves more as a metal protecting medium, playing no part as a coolant, as in a ring or chain oiled bearing, renders volume more of a detriment than an asset. In general, submergence of approximately one-half to three-quarters of the lowermost rolling element will be sufficient.

Grease, in turn, is advantageous in that it will not leak out where oil might, and that it furnishes an effective seal to prevent entry of dust, dirt or water to the bearings. To serve this purpose, under average temperature conditions, greases which are relatively fluid in consistency will afford both the proper lubrication and protection with a minimum of channelling and development of heat due to internal friction. However, higher temperatures in enclosed economizer housings may require the use of a somewhat more inert grease for motor bearings of this type.

Reversing mechanism gearing including worm, bevel, and chain driving gears under ordinary conditions will require a relatively stiff-bodied lubricant which will spread evenly and stick tenaciously to the wearing surfaces, links, and teeth. It should not be so thick as to form in clots where applied, and thus cover but parts of the wearing surfaces, to be thrown off by centrifugal force during operation. On the other hand it should be viscous enough to insure against loss from dripping. As a rule, a straight mineral lubricant of from 1,000 to 2,000 sec. Saybolt at 210° F. will meet these requirements.

Bearings of chain sheaves can be lubricated by grease cups or simply oiled by hand, whichever the installation is designed for. Such bearings are relatively small as a rule, built with no mechanical means of lubrication, and subject only to very slow shaft speeds. Grease for such lubrication need not possess a high melting point, for though the temperature may rise to perhaps 150° in an enclosed housing, it will never be so great as to liquefy an ordinary cup grease excessively. When the apparatus is built for hand oiling, the lubricant can be the same as used on the motor bearings.

Reversing lever fulcrum and other miscellaneous bearings for driving shafts, etc., can be similarly lubricated by hand periodically at each inspection by the operator.

Typical constructions may differ somewhat in regard to the manner of driving the scraper mechanism. Belt drives usually involve fewer complications than do chain drives from a single motor, especially where considerable shafting and individual chain drives therefrom are concerned.

Fans and Driving Engines

Where the installation is designed for forced or induced draft, the lubrication of the draft fan and its driving engine will also require consideration. Fan bearings in such installations are frequently water cooled, and lubrication of them develops no special difficulties beyond the possible transmission of considerable heat via the motor. To meet this condition, the lubricant should be fairly heavy in body; i. e., having about 500 sec. Saybolt viscosity at 100° F. Such bearings are usually of the ring or chain oiled type.

The driving engine for the fan is generally a simple steam-driven, single-cylinder, horizontal reciprocating engine. Normally, it will be subject to the same temperature conditions as the other mechanisms considered heretofore.

Lubrication of engine cylinders and valves will usually be a problem of dealing with wet steam of perhaps 1 to 2% quality. In such a case the lubricant to use should be a cylinder oil compounded with sufficient fixed or fatty oil to effectually produce the required emulsion and stickiness in the oil when in contact with wet steam.

Lubrication of the other engine mechanisms, such as crankpin, wristpin, crosshead guides, etc., can be best carried out by using a straight mineral oil of about 300 sec. viscosity. The same oil as used for ring-oiled motor bearings, etc., will usually meet the requirements very satisfactorily.

Vertical steam engines for draft fan drive involve no particular lubricating peculiarities other than stated for horizontal engines, and the lubricants to use for each part would be the same.

Engine lubricants are usually applied by means of hydrostatic steam cylinder lubricators attached to the steam pipe, and sight feed oil cups, or grease appliances attached to pin bearings and guides.

Where the draft fan is driven by motor, the lubrication factor becomes simply that of using the proper lubricant in the oil wells or housings of the motor bearings. The condition will be very similar to those under which the scraper driving motor operates. Hence, the same oil can be used satisfactorily, unless anti-friction bearings requiring grease lubrication are involved.

Blowers and Fans

Lubrication of blowers and fans is essentially a matter of serving their bearings with the proper grades of oil or grease, according to their design and the provisions for supplying the lubricants. Generally, such equipment will be fitted with ring oilers or anti-friction bearings. As a result, their lubrication will be essentially akin to that of centrifugal or rotary pump bearings, or those of the electric motor which may be of the same nature.

Ring oiling affords a most efficient method of lubrication whereby the bearings are flooded with a considerable excess of oil over the amount that would theoretically be necessary to furnish the requisite oil film. By flooding the bearing with oil, the latter serves not only as a lubricant but also as a cooling medium to carry away part of the frictional heat developed, thereby reducing the temperature of operation. If the oil reservoir in the base of the bearing has been properly designed and is of sufficient capacity, this overheated oil will have ample opportunity to become sufficiently cooled after each circulation by contact with the reservoir walls, particularly if the radiation of the latter is not interfered with.

Where ball or roller bearings serve to support the journals of fans, rotors, or impellers, the matter of flood lubrication is eliminated. Prevention of corrosion in such bearings is regarded by many as perhaps the chief function of the lubricant, rather than actual reduction of friction or removal of heat.

Wherever possible, the housings should be oil-tight, for thereby can we

COTTON CONSUMPTION AND ACTIVE SPINDLES

The Department of Commerce, Bureau of the Census, Washington, D. C., has issued the following statistics on cotton consumed, cotton on hand, active cotton spindles for the month of March, 1927 and 1926, with statistics of cotton consumed, for the eight months ending March 31. The statistics of cotton in this report are given in running bales, counting round as half bales, except foreign cotton, which is in equivalent 500-pound bales. Linters not included:

Locality	Year	Cotton consumed during (bales)— March	Cotton consumed during (bales)— 8 months ending Mar. 31	Cotton on hand Mar. 31— In consuming establishments (bales)	Cotton on hand Mar. 31— In public storage and at compresses (bales)	Cotton spindles active during Mar. (number)
United States	1927	*694,193	*4,717,680	*1,980,103	*4,491,955	32,919,288
	1926	635,896	4,381,448	1,771,897	4,164,062	33,245,114
Cotton-growing States	1927	497,169	3,399,909	1,339,185	4,123,620	17,596,644
	1926	439,838	3,032,176	1,073,405	3,932,260	17,267,146
New England States	1927	165,493	1,102,900	540,249	134,089	13,852,780
	1926	165,286	1,122,216	597,993	166,117	14,411,638
All other States	1927	31,531	214,871	100,669	234,246	1,469,864
	1926	30,772	227,056	100,499	65,685	1,566,330

* Includes 21,773 Eg. 7,259 other for., and 1,801 Am-Eg. consumed, 55,424 Fg., 15,234 other for., and 5,532 Am-Eg in consuming est.; and 13,445 Eg., 9,967 other for. and 3,378 Am-Eg in public storage. 8-months consumption 150,705 Eg, 49,687 other for., and 14,928 Am-Eg.

Linters not included above were 68,176 bales consumed during Mar. in 1927 and 65,636 bales in 1926; 226,987 bales on hand in consuming establishments on Mar. 31, 1927, and 183,508 bales in 1926; and 79,140 bales in public storage and at compresses in 1927, and 87,763 bales in 1926. Linters consumed during eight months ending Mar. 31 amounted to 523,327 bales in 1927 and 534,084 bales in 1926.

Creo-pine Sub-flooring

IT is interesting to note that Creo-pine Sub-flooring which is generally accepted as a standard specification in the textile industry, is proving its economy and value in many other fields. (Above is shown the new Sears, Roebuck & Company plant in Atlanta in which more than 1,000,000 feet of this material was used.)

SOUTHERN WOOD PRESERVING CO.
ATLANTA, GA.

Treating Plants EAST POINT, GA., *and* CHATTANOOGA, TENN.

Sales Offices.

NEW YORK · PHILADELPHIA · PITTSBURG · TOLEDO
CLEVELAND CHARLOTTE, N.C.

See also CONSOLIDATED TEXTILE CATALOG

reduce the viscosity of the lubricant and, in consequence, the internal friction that will be developed during operation. Usually an oil of a viscosity in the neighborhood of 100 sec. Saybolt at 100 deg. F. will give the best results under such conditions.

Where leakage is possible a grade of semi-fluid grease should be used, which will have just enough body to cause it to remain in the bearing housing. In general, one charge of oil in a roller or ball bearing equipped with an oil-tight housing should last for a period of several months. Where grease is required, however, it should be renewed more frequently, according to the extent of seal which is maintained, etc.

All fans and blowers will not require or be equipped with ring oilers or anti-friction bearings. In certain cases grease cups, pressure gun fittings, or sight feed oiling devices may be regarded as suitable by the builders, especially where operation is to be more or less intermittent. For such service a medium bodied engine oil or a plastic grade of compression cup grease will in general be found satisfactory and economical.

Structure of the Wool Fiber

Internal Organization of Wool Fibers and Its Influence on Physical Properties of Wool

By Westford

SPEAKMAN, a British research worker on wool, has discovered evidence that the feel, or "handle" as he calls it, is not due merely to differences in the diameters of the fibers of different kinds of wool, and to their scale arrangements, but to some more subtle inherent difference in the physical nature of the cells of the fibers. Further work is now under way to try to demonstrate these ideas more clearly.

Composed of Solid Elements

Meanwhile, a few points that he has brought out in developing his theories may be of interest not only to wool men but to others who are interested in the finer details of the structure of textile fibers. The different natural fibers have points of similarity, and the newer knowledge of them is so new that students are not all agreed on some of the details. Fibers seem to be composed of some sort of relatively solid structural elements which supply strength, embedded in or cemented together by some viscous material which allows them to stretch.

Speakman pictures each wool fiber as consisting of this sort of a system, but as being just a little more complicated. He describes it as an elastic cell wall enclosing both a fibrillar structure and a viscous medium of gelatinous character included in its interstices. This gel sets just like any other gel. Setting is displayed by the wet fiber in water at the freezing point and when dry in air at ordinary room conditions.

This is shown by the fact that wool when in a saturated atmosphere, or in other words when wet, stretches far more than dry wool—actually up to 70% beyond its original length. This is because the gel has taken up water and become less viscous, or more readily deformed.

The same wool, if stretched while it is in water at 32 deg. F., will stretch just as far, but, at this lower temperature, twice as much tension is required to produce this effect—further evidence of the gel nature. Incidentally, this means that wool at this temperature is twice as strong as it is at ordinary temperatures when wet or in saturated air.

It has been found that some of these stretching or elastic properties vary in different wools, owing to differences in the internal structure or nature of the wool substance, and that these differences have much to do with feel. More perfect understanding of the structure and properties may aid in making valuable contributions to the technique of finishing.

The peculiar structure of wool fibers is also partly confirmed by evidence from another source. It has been found that wool can be separated into its constituent cells by treatment, for several days, with dilute ammonia at low temperatures, and that the cells also break down and reveal their contents as long slender threads or fibrils, most of which are parallel for the length of the spindle-shaped wool cells. In the sheep's skin, the cells that go to form wool are originally spherical and become elongated by being forced up the shaft of the fiber. During this deformation, the gelatinous contents develop the parallel fibrillae.

One of the particularly valuable properties of wool is its ability to recover its original length after being stretched. The process is slow but the wool eventually comes back; it is perfectly elastic. The reason for this is that the highly elastic cell walls pull the contents of the cells back into the original shape. It is the same phenomenon, surface tension, that causes a deformed drop of water to tend to come back to its natural spherical shape. Both the water drop and the wool cell act as though they had an elastic skin around them.

Preserving Tobacco Shade Cloth

Experiments Indicate That Treatment with Lead Chromate Makes Possible Use of Cloth for Two Seasons

*By H. P. Holman and T. D. Jarrell**

THE Bureau of Chemistry of the U. S. Department of Agriculture has for several years been trying to develop preservative treatments for tobacco shade cloth that would make it serviceable for two or three seasons instead of one. In the light of previous experience with waterproofed canvas and cotton yarn exposed to weather, and in view of the fact that mildew causes little damage to exposed cloth in the Connecticut Valley, it was believed that the deterioration in the strength of this fabric while in use is caused by sunlight. Four years ago, in cooperation with the Tobacco Substation of the Connecticut Agricultural Experiment Station, exposure tests were started on shade cloth that had been subjected to four treatments designed primarily for protection from sunlight.

During the seasons of 1925 and 1926, after several of the tests that were first attempted had been eliminated, exposure tests over growing tobacco were made on large pieces of shade cloth treated with lead chromate and with petroleum asphalt solution containing lampblack. One reason for using lampblack was that it had been found particularly effective in reducing the injurious effect of sunlight when combined with waterproofing materials for canvas.

*Chemist and assistant chemist, respectively, Bureau of Chemistry, U. S. Department of Agriculture.

The treatments were applied in the laboratory with such equipment as was available. This consisted of large copper and enameled kettles and a large clothes wringer. During treatment the cloth was manipulated with the hands, protected by rubber gloves, in order to get uniform impregnation. The treated goods were dried simply by spreading out upon the grass-covered ground.

Lead Chromate Treatment

In applying the lead chromate treatment, the wet cloth, after being desized with malt diastase solution, was thoroughly impregnated with a 14% solution of lead acetate slightly acidified with acetic acid, and after wringing—but without drying—was impregnated with a 5% solution of potassium bichromate. It was then rinsed and wrung out several times to remove excess of bichromate before drying. Lead chromate amounting to about 19% of the weight of fabric after desizing was put on in this way. A small piece of cloth similarly treated without previously desizing gained about 17½% in weight. It might, therefore, be possible to apply the lead chromate treatment without desizing.

The asphalt and lampblack treatment was applied to the dry fabric, without previously desizing, by immersing the cloth in cold mineral spirits containing about one pound of petroleum asphalt and six ounces of lampblack per gallon and then passing it through the wringer. The treatment added about 50% to the weight of the fabric.

It was thought that the color of the treated fabric might affect the character of growth and quality of the tobacco. In order to permit observations to determine the possibility of such effects, areas 22 yds. by 22 yds. square, or 4 bents, were covered with the experimental cloth. The office of Tobacco Investigations of the Bureau of Plant Industry, U. S. Department of Agriculture, and the Tobacco Substation of the Connecticut Agricultural Experiment Station cooperated by placing the cloth for the exposure tests and by making observations on growth and quality of the tobacco. There was no noticeable effect from the color of the treated cloth.

Lead Chromate Successful

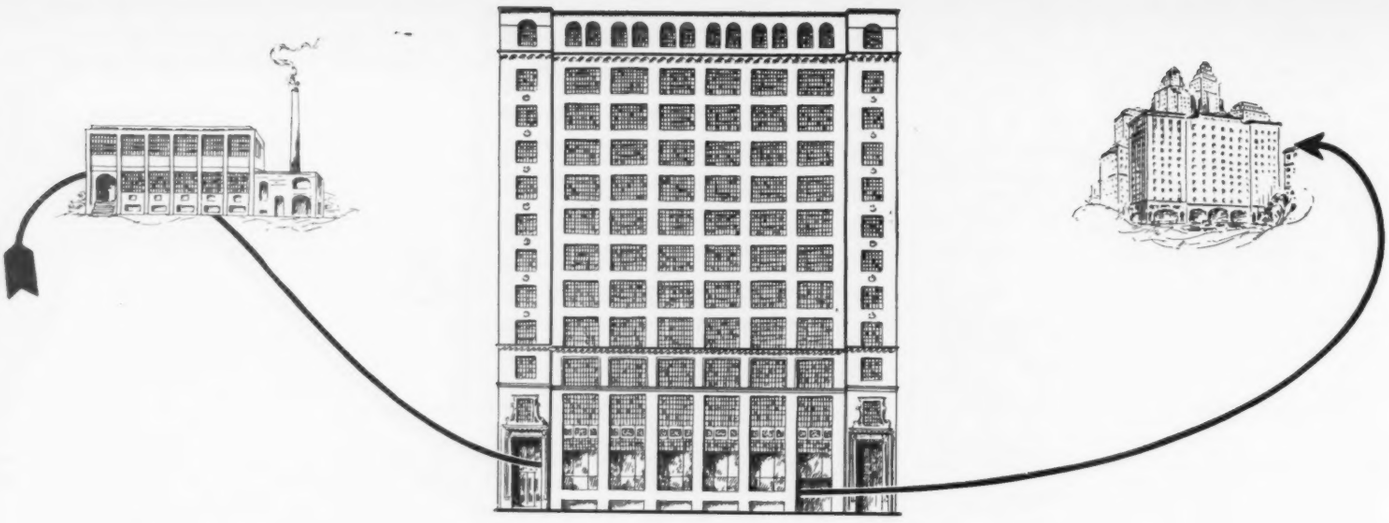
Tests of tensile strength after one season's exposure indicated that the cloth treated with lead chromate had lost 5% of its strength, that the cloth treated with asphalt and lampblack had lost 14%, and that untreated cloth had lost 47%. After two seasons' exposure, cloth treated with lead chromate was still stronger than untreated cloth after one season's exposure. These results show that the lead chromate treatment is the better and that shade cloth heavily treated with lead chromate can undoubtedly be used a second season.

Further experiments with the lead chromate treatment are contemplated to ascertain the effectiveness of lighter treatments and to determine the practicability of the lead chromate treatment as a process for preserving tobacco shade cloth when modified as required for commercial application. It is not practicable to apply the treatment by hand. In any further exposure tests that may be made, it is hoped that larger areas, at least one acre, can be covered with the experimental cloth.

Activity of Wool Machinery in March

WASHINGTON, D. C.—The Department of Commerce announces the following statistics on active and idle wool machinery for March, 1927, based on reports received from 912 manufacturers, operating 1,089 mills. This is exclusive of 7 manufacturers, operating 12 mills, who failed to report for the month:

Month	Looms			Sets of cards	Combs	Spinning Spindles	
	Wider than 50 in. reed space	50 in. reed space or less	Carpet and rug			Woolen	Worsted
Per cent of total active number of machines							
Mar. 1927	60.2	66.5	67.0	77.2	74.7	74.8	66.9
Feb. 1927	62.0	66.9	66.1	73.4	75.8	71.0	69.3
Mar. 1926	61.2	67.8	72.3	76.4	71.1	71.8	70.2
Per cent of total active hours (maximum single-shift capacity)							
Mar. 1927	61.2	63.4	66.4	79.9	81.4	76.7	66.2
Feb. 1927	64.3	61.5	63.9	75.2	89.4	73.8	71.2
Mar. 1926	62.1	60.7	69.8	78.3	79.1	73.4	69.7



From Mill to Market Via the Tex-in-Tackt Process

The Tex-in-Tackt Treatment is adapted for the following:

- Poplins
- Poriet Twills
- Twill Cords
- Gabardines
- Sheen Fabrics
- Broadcloths
- All Worsted Fabrics
- Silk and Wool Mix
- Cotton and Wool Mix
- Decorated Fabrics
- All Closely Shorn Fabrics
- Knit Fabrics

WHAT is this Tex-in-Tackt service? Simply a process of final finishing and conditioning—a dependable convenient service for mill men who do not have their own facilities for this work. The work is done with a David Gessner Decating and Conditioning Machine.

Goods are made "ready for the needle" without excessive cost or loss from shrinkage. Our service includes examination and detailed report after your goods are processed, and packed in regular mill fashion for distribution locally or throughout the country. It is very definitely—a ***complete*** service.

A list of various woven and knitted fabrics for which the Tex-in-Tackt service is available is provided at the left. Goods can be made absolutely shrink-proof, so that they will not shrink under the iron, and with but minimum shrinkage in the piece. Cockling and washer streaks are eradicated and prevented.

Poplins and cloths of a similar nature that have a tendency to shrink excessively with the ordinary method of sponging can be treated so that they will not shrink under the iron or shrink excessively in the piece. Broad cloths are lustred with a permanent finish. Manipulated and decorated fabrics such as worsted and cotton, worsted and silk, worsted and rayon can be treated to prevent puckering, cockling and other such defects as appear in fabrics of this kind.

All knitted fabrics, except tubular goods can be finished and made non-shrinkable.

Let us talk over your particular product with you, and tell you how the Tex-in-Tackt process can aid.

MORRIS GARFUNKEL, INC.

DIVISION AMERICAN SHRINKERS CORP.
TEXTILE SHRINKERS SINCE 1900

318-326 W. 39th St. New York

TEX-IN-TACKT

DAVID GESSNER DECATING AND CONDITIONING MACHINE USED EXCLUSIVELY

Steam Plant Performance

Possibility of High Steam Temperatures and Pressures

By W. F. Schaphorst

Drs. Mellanby and Kerr of Glasgow have collected some interesting figures on possible future performance of steam plants, which have been published in the British journal *Engineering*. They conclude that 1,250 lbs. per sq. in. will eventually be the best pressure. Feed water will be heated to 545 deg. F. The maximum temperature of the steam will be 900 deg. F. With a vacuum of 29 in., and an economizer and boiler efficiency of 90%, assuming that the auxiliaries will consume 3%, their result is 9,875 b. t. u. per kilowatt-hour. This is equivalent to 0.544 lbs. of coal per horsepower-hour, on the basis of 13,500 b. t. u. per lb. of coal

Just how a temperature of 900 deg. F. can be safely carried is not explained with sufficient clearness for me to comprehend. But they claim that 900 deg. F. is possible even with modern materials. Most engineers consider 700 deg. F. as the safe limit under present-day conditions. In some places 750 deg. F. is actually being used. After 750 deg. is reached the ultimate strength of steel decreases very rapidly and the elastic limit has decreased about 33 1/3%. However, it may be that Drs. Mellanby and Kerr are right, for they apparently have done a great deal of experimenting. There is still much to be known about power plant performance under higher pressures and temperatures.

CO_2 Content of Flue Gas

Simplicity of Measuring Warrants Knowledge of This

By W. F. Schaphorst

If there is a power plant engineer today who does not know what the CO_2 content of his flue gas is, it is generally safe to say that one, two, or three unusual conditions exist, as follows:

(1) The plant is exceedingly small and very little fuel is burned, so that the first cost of a CO_2 outfit will hardly be returned.

(2) The engineer's superiors are of the "close-fisted" variety and refuse to buy an outfit for him.

(3) The engineer (?) is not well versed in modern power plant practice and does not know how desirable it is to have the right percentage of CO_2 continually passing out of the chimney.

There are now so many CO_2 outfits on the market—from the well-known Orsat to the modern electric outfit—and selling at all prices from low to high, that it is indeed a small plant that cannot afford one. In other words, the CO_2 problem is solved for the engineer.

The latest device that has come to my notice was on display at the last Power Show in New York. It does not contain any chemicals, glass, delicate parts, small orifices, ink, pens, or running water. Its operating mechanism consists of a standard motor and two fans which measure the CO_2 by comparing the force exerted on one fan by flue gas moving at a high velocity with that of air moving at the same velocity. Since CO_2 is 50% heavier than air, the difference in force exerted is appreciable, and, when intensified by traveling at a high velocity, can be indicated on a dial with great accuracy.

This device does not embody any delicate parts and is said to be so rugged that it can be depended upon to give accurate service for years under the severest of operating conditions. It indicates CO_2 continuously, and a permanent record for the engineer is also made, while the scale is easily readable from any position in front of the boiler.

Cranston Worsted Mills Addition

Main Mill Extended to Provide More Space for Carding, Combing, and Spinning Departments

AN addition to the plant of the Cranston Worsted Mills, Bristol, R. I., is an extension of the four-story mill building erected in 1920, and was built primarily to provide space for expansion of the combing, carding, and spinning departments located in the second, third and fourth stories, respectively. The first story is used as a receiving room for sorted wool and is planned to provide for extension of the wool-washing department, which is located in an adjoining one-story building.

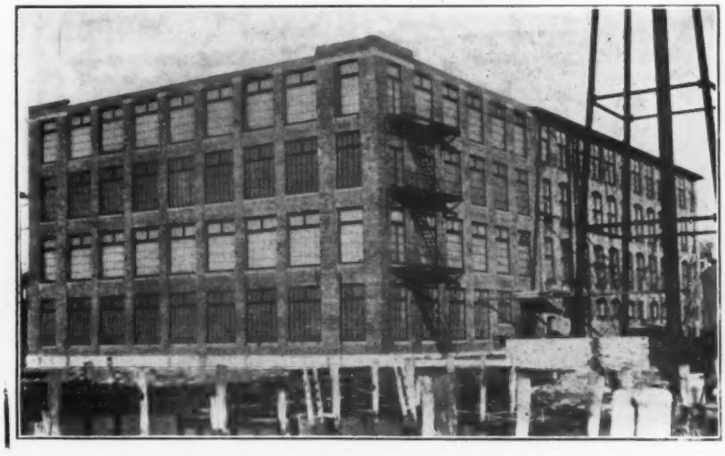
The story heights and floor levels of the main building are maintained, but in the first story of the addition, a temporary floor was built at a higher level so that the hand trucks in which wool is carried can be easily rolled from the automobile delivery trucks on to a receiving platform at the same level as the floor. This floor is so constructed that it can be easily removed, entirely or in part, without disturbing the rest of the structure.

The elevator tower located at the center of the end of the main building was left intact, but the end walls at either side were entirely removed. A new partition was built in the first story between the main building and the addition, with a large area of glass to give as much indirect light as possible, and to protect the main building from cold drafts, etc., while doors are open for deliveries. By cutting a new door in the elevator tower at the raised floor level and making minor alterations to the elevator equipment, vertical access to all other floor levels is provided.

The site is adjacent to Bristol Harbor, and as the area available for extension in the direction desired was restricted it was necessary, in order to obtain the required space and maintain the bay spacing of the main building, to extend beyond the mean high water line into the harbor. This wall is protected from tidal and wave action by steel sheet piling and stone rip rap. The addition is 70 x 98 ft., the width of 98 ft. being the width of the adjoining building. The height of the stories is 14 ft.

The structure is, in general, of mill construction, the foundations and first floor (which is built on the ground) being of reinforced concrete. The walls above grade are of brick with granite trim. On account of the severe exposure, walls were built of a hard-burned face brick. All mortar was integrally waterproofed, and after erection all brickwork received two applications of waterproofing. Window sills are of granite. To provide a maximum of light, the width of piers was reduced to a minimum. Windows are 8 ft. wide by 10 ft. 4 in. high, the lower portion being stationary, and the upper portion having transoms for ventilation. The tops of windows are at the ceiling level. Window frames and sash are of wood, double glazed, to prevent condensation, with ribbed glass on the outside and clear glass on the inside.

The floor framing is of hard pine timber in 11 ft. bays, with 22 ft. spans running across the building. In order to eliminate alternate columns lengthwise of the building and better accommodate machinery, steel girders were used. Roof framing is entirely of hard pine. Floors are of 4 in. hard pine plank, with finished flooring of maple treated with a preservative. Roofing is of pitch and gravel. Heating is by steam from the central boiler plant. The lighting and fire prevention systems are of the usual type. Toilet and washing facilities and stairways are located in the main building. A fire escape is provided in the new building as an additional emergency exit. The addition was designed and construction supervised by Jenks & Ballou, engineers, Providence, R. I.



Extension to Cranston Worsted Mills, Bristol, R. I.

Varying Speed

Variable Speed Transmission in the Textile Industry

It is interesting to note that in a list of the industries using variable speed transmission to the greatest extent, which was compiled by the Reeves Pulley Co., Columbus, Ind., the textile industry ranks third from the top. This list, which was based on the sales records of this company, is arranged in the order of quantities used, as follows:

(1) Automobile.
(2) Baking.
(3) Textile.
(4) Canning.
(5) Paper.
(6) Wire.
(7) General Conveyor.
(8) Rubber.
(9) Stoker.
(10) Paper Box and Corrugating.
(11) Annealing and Heat Treating Ovens.
(12) Veneer.
(13) Meat Packing and Abbatoirs.
(14) Mining.
(15) Machine Tool.
(16) Printing.

It is said that in machines used in over a hundred different industries, variable speed transmission is now incorporated as standard equipment.

Value in Textile Industry

Among the machines employed in textile mills which make use of variable speed devices are tenter frames, washers, printing machines, silk throwing machinery, mercerizers, dryers, soapers, mangles, singers, conveyors, fans, blowers, extractors, stokers, and pumps.

In a textile finishing plant where several machines are placed in range, variable speed transmission equipped with automatic control will serve to keep the machines synchronized in speed, taking care of the stretch or shrinkage in the cloth. There is said to be no need for an operator to watch the tension of the cloth or to change the speeds by hand to keep the machines running in unison, as the automatic control is claimed to be accurate and dependable.

In the Reeves automatic control, an operating lever on the transmission is attached by a cable or chain to a so-called "floating" roll, and is accurately balanced by weights. The material in process passes under this compensating roll. As the tension of this material increases or decreases, this movement is immediately transmitted to the transmission device. The operating lever follows the movement of the floating roll, so that the proper speed is maintained at all times.

What are your problems, Mr. Textile Manufacturer?

LET us tell you how to use Celanese. We have customers who are using our yarn for every conceivable operation in knitting and weaving.

Our technical men have practical information enabling them to show you how Celanese can be used and just what denier and twist is the correct yarn for any operation.

Let us assist you also in the dyeing and finishing of Celanese fabrics. We can give you complete information on dyeing Celanese in conjunction with any other yarns, to obtain union shades or cross-dye effects. If you wish to use any group of dyestuffs in the presence of Celanese, we can supply you with practical formulas.

Pure silk in the presence of Celanese may be degummed without delustering the Celanese. The formula called for in this case is as short and practical as that employed in degumming methods for silk alone.

Celanese brand yarn is highly elastic and remarkably durable; and it has unique hygienic qualities. The dyestuffs used for dyeing Celanese brand fabrics give colors that are unusually fast to sun, suds, salt-water and perspiration.

CELANESE
REG. U.S. BRAND PAT. OFF.
YARNS

CELANESE CORPORATION OF AMERICA
(Formerly American Cellulose & Chemical Mfg. Co. Ltd.)
15 EAST 26TH STREET, NEW YORK
WORKS AT AMCELLE (NEAR CUMBERLAND) MARYLAND

CELANESE is the registered trademark, in the United States, of the Celanese Corporation of America, to designate its brand of yarns, fabrics, garments, etc.

QUESTIONS AND ANSWERS

CORRESPONDENCE WITH READERS

Putting Stain on Worsted

Technical Editor:

I would like some information on how to put a brown stain on worsted and mohair yarn and get an even shade. Where is the proper place to put this stain on, at the gill box or at the drawing box? We are mixing mohair and worsted tops back of our can gill box (first operation) in the drawing room. We drop the stain on the ends as they go into the back rollers on this mixing box. When the work gets down on the roving the shade is quite uneven. When the yarn gets on to the dresser spool the shade is very uneven.

I would like some information on the proper way to ratch work for drawing and spinning machinery for long luster wool and blends of long wool and mohair. What kinds of roller covering are best suitable for spinning these long wools? Is chrome leather better than hard oak tan for luster and mohair? How can the beard be regulated? Has the quality of wool anything to do with one blend of yarn having less beard than another blend?

How warm should a spinning room be kept to get the best results on mohair and worsted? I will appreciate any information you can give me on the subject of cut rollers in spinning, uneven shade, and too much beard on yarn. (6086)

The stain can be applied at the can gill by droppers, or at the 2-spindle gill box by dropping it on the end as it enters the flyer eye. It is almost impossible to get even shades throughout a lot. There are three necessary factors which help in the production of a uniform stain:

(1) The solution must be uniform in strength at all times.
(2) The quantity applied must be constant.
(3) Some method of batching or blending must be used to blend the product of the boxes where the stain is applied.

Perhaps you make the stain in small quantities. Make as large a quantity as possible. Sixty gallon tanks are used in many mills for this purpose. The water used to prepare the stains must not be hard. Read the chapter on "Water—Its Testing and Softening" in Howard Priestman's book, "Principles of Wool Combing," where full information regarding this important matter is given. We do not see any objection to unevenness when a stain is merely used as a safeguard to prevent mixes and mistakes in subsequent processes.

Opinions differ with regard to the ratching of wools and mohair in the drawing. Ratch is controlled by many factors, such as staple, quality, size of end, "condition" of wool, and amount of twist in the end. We set our ratches so that a "boardy" or too taut a condition does not exist between the back roll and top line of carriers. Sometimes we may have to allow ⅛ in. increase in ratch for each box, going back in the drawing room from the rover. At other times ¼ in. increase may be necessary.

Luster wools and mohair are very strong fibers and hard to draw, therefore no attempt to break the fibers in the drawing should be made. So long as the end is even, run your ratches as open as you possibly can. It preserves the length of staple and makes it easier for the top front roll to draft the stock. Always ratch to suit the longer staple whenever a blend is made and draft according to the shorter staple in the blend. We never attempt to break the staple for long wools except where the staple is poor. Breaking the longer fibers in a poor top enables a shorter ratch setting to be used on the fine end of the drawing and in the spinning. The result is a more even yarn and a better spin. Experience has proved this many times. However, we only "break" as a last resort, and never advise doing it for luster wools or mohair.

Roll Coverings

The best roll to use for long wool and mohair is a soft-covered roll. This type of roll has a felt cover stretched over a wooden or iron boss. Over the felt the leather cover is placed and either tacked or laced according to the type of boss used. They give good service, but when once grooved or badly worn a new cover must be applied. When the resiliency of the felt disappears a new one is necessary or cockled yarn will soon appear. For hard covered rolls we prefer a double-covered chrome tanned leather. We have seen rubber-covered rolls that, after twelve months' continuous service were in good condition, and recently spinning frames were inspected where cork-covered rolls had run for eight months on carpet wools and wool and mohair blends, without showing any appreciable signs of wear.

Beard on Yarn

The "beard" present on yarn does depend upon the quality, staple, and blend of the wool or wools used. In addition, the system of spinning used and spindle speeds, also the "drag" used, affect the length of "beard." Flyer-spun yarn owes its smoothness to the low speeds used, not because the flyer is used. Ring-spun yarn is smoother than cap-spun or mule-spun yarn. If one blend has a higher percentage of coarser wool than another, other things being equal, it will have more beard. If the "drag" allows too much ballooning and yarn strikes separators excessively, more beard will result. If room is cold and humidity low, there will be rough yarn. A good temperature is 75° F. Use as high humidity as possible as long as it does not interfere with the spin; 55% to 60% gives good results. It is not enough to just have the room heated sufficiently; the working parts of the machines must also have the right temperature. They should never feel cold to the touch. Ventilate the rooms scientifically; keep the windows closed.

If you are troubled with cut rollers in spinning, it may be due to one of the following causes;

(1) Short ratch.
(2) Carriers set too close to front roll.
(3) Too much twist in roving. (This means, practically, short ratching.)
(4) Poor roll covers.
(5) Dry roll bearings.
(6) Not enough pressure.

Nos. 1 and 2 cause most of the cut rolls generally. Mohair often requires a ratch setting one to two inches longer than staple. So long as the yarn is satisfactory, set ratch as open as possible.

* * *

Blue Spots in Bleached Knitted Cloth

Technical Editor:

We are mailing you a sample of knitted cloth which shows a number of blue spots. As far as the knitting mill can find there is no place in their plant which might cause this. They are using a peroxide bleach and claim they are not using any bluing. They state also that they are not knitting any colored yarns in the neighborhood of where this cloth was made. On the other hand, the spinning mill has proved by tests that the chalk they use will bleach out, and we might also state that subsequent shipments of this same yarn have been knitted and bleached out perfectly. No colored yarn is being made in the spinning mill. (6098)

It would seem that these spots are from chalk which was used in marking lots. In most cases these chalks are removed in the bleaching process, but there are a few which do not come out. The spots in question disappear very quickly when placed in a weak bath of chlorine bleach, and this would be a practical way to save any cloth in which they appear. Acids or alkalies do not remove them, neither does the peroxide bleach. We would suggest that all the chalks and marking materials throughout the plant be checked.

* * *

Mr. C. Hutton, Technical Editor,
TEXTILE WORLD.

Dear Mr. Hutton:—

I have yours of the 22nd. This is just the information that we desired and we wish to express our thanks for your letter which explains the matter so well.

Yours very truly,

CLAYVILLE KNITTING CO.

(Signed) Geo. Coffee, Sup't.

Regarding Indanthrene Colors

Technical Editor:

We would be very much obliged to you for any information you may give us regarding Indanthrene colors. What is their relative cost compared to the direct colors? How are they applied, and why are they not more commonly used? Can you put us in touch with some of the domestic manufacturers of this type of dyestuff? Are there any direct cotton colors which can compare with the Indanthrene colors? Any other information relative to this will be greatly appreciated. (6094)

The Indanthrene class of dyestuffs are vat dyes derived from anthraquinone and related products. They are perhaps the best known and possess the best all around fastness of the vat dyes. They must be applied from quite strongly alkaline reduced dyebaths, hence it is difficult and sometimes impossible to apply them to wool and silk. They are primarily cotton dyes and are used wherever the most severe requirements as to fastness are met. Wash goods, draperies, colored stripes in gray goods as shirtings, etc., are dyed with these colors.

Indanthrene dyes are, as is mentioned above, dyed from a highly alkaline reduced bath. They are brought to the trade in the form of paste containing from 8⅓ to 20% coloring matter. The bath is made up with the necessary amount of color paste (which, of course, depends upon the depth of shade required and strength of color paste), up to 3% caustic soda, and enough hydrosulphite to reduce the color paste entirely (up to 3% should be sufficient). The goods are entered, after boiling-out to remove wax, etc., and dyeing is carried out at a temperature of from 105° F. to the boil, dependent upon the color paste used and depth of coloring required. Some of the colors dye very much like the direct cotton colors, dyeing and developing almost simul-

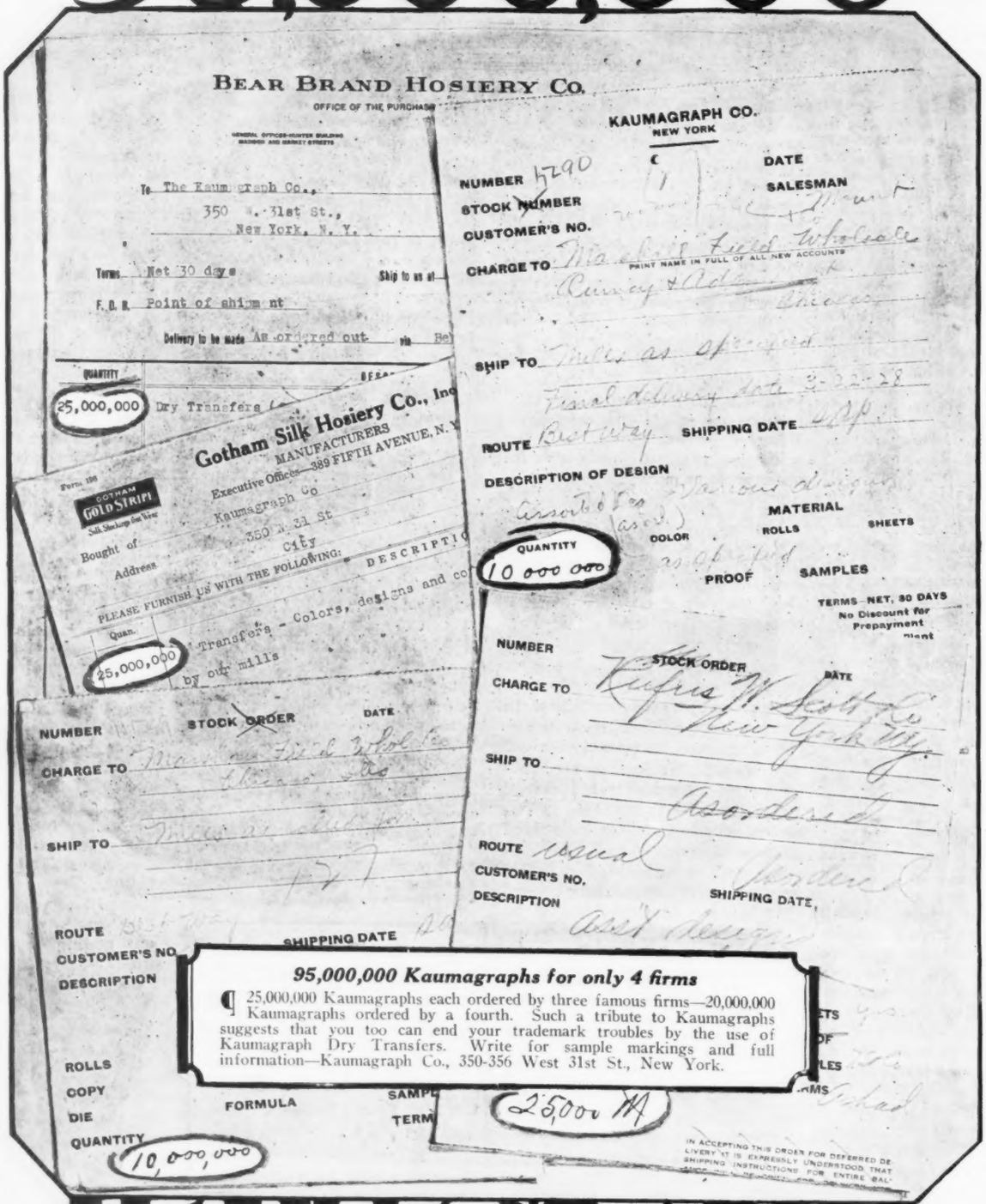
In this department, we undertake to answer, free of charge, to the best of our ability, questions pertaining to textile matters received from any regular subscriber to TEXTILE WORLD. Inquiries should give the fullest information and data possible. In the case of damage to material, a sample should be sent. In this way answers can be given which will be of immediate technical value to the correspondent and to others in the same line. Inquiries pertaining to textile processes, machinery improvements, methods of management, the markets, etc., are especially invited as well as any legitimate discussion on the views expressed. All inquiries must be accompanied by the name of the person inquiring, not for publication, but as an evidence of good faith. The identity of those seeking information on technical subjects will not be disclosed.

If the question is not of general interest to textile readers and involves expensive investigation, a charge covering the cost may be made, of which the inquirer will be advised before any expense is incurred.

Letters expressing opinions or voicing criticism will be signed by the correspondent's name unless the letter itself contains a request that the name be withheld.

For prompt service, technical inquiries should be sent directly to the Technical Editor, TEXTILE WORLD, 65 Franklin St., Boston, Mass.

95,000,000


BEAR BRAND HOSIERY CO.
OFFICE OF THE PURCHASER
To The Kaumagraph Co.,
350 W. 31st St.,
New York, N. Y.
Terms Net 30 days
Ship to us at
F. O. B. Point of shipment
Delivery to be made As ordered out via
QUANTITY
25,000,000 Dry Transfers
Gotham Silk Hosiery Co., Inc
MANUFACTURERS
Executive Offices—389 FIFTH AVENUE, N. Y.
Form 198
GOTHAM GOLD STRIPE
Bought of Kaumagraph Co
Address 350 W 31 St City
PLEASE FURNISH US WITH THE FOLLOWING:
Quan. DESCRIPTION
25,000,000 Transfers - Colors, designs and co
by our mills
KAUMAGRAPH CO.
NEW YORK
NUMBER 5290
STOCK NUMBER
CUSTOMER'S NO.
DATE
SALESMAN
CHARGE TO Mail Order Dept Wholesale
PRINT NAME IN FULL OF ALL NEW ACCOUNTS
Conway & Adams Chicago
SHIP TO Mail as directed
Final delivery date 2-22-28
ROUTE Best way SHIPPING DATE Apr.
DESCRIPTION OF DESIGN Various designs assorted (as ord.)
MATERIAL
COLOR ROLLS SHEETS
QUANTITY 10 000 000
PROOF SAMPLES
TERMS—NET, 30 DAYS
No Discount for Prepayment
NUMBER STOCK ORDER DATE
CHARGE TO Rufus W. Scott Co New York City
SHIP TO As ordered
ROUTE usual
CUSTOMER'S NO.
DESCRIPTION Asst designs
SHIPPING DATE
NUMBER STOCK ORDER DATE
CHARGE TO Mail Order Dept Wholesale Chicago
SHIP TO Mail as directed
ROUTE
CUSTOMER'S NO.
DESCRIPTION
SHIPPING DATE
ROLLS
COPY
DIE
FORMULA
QUANTITY 10,000,000
95,000,000 Kaumagraphs for only 4 firms
¶ 25,000,000 Kaumagraphs each ordered by three famous firms—20,000,000 Kaumagraphs ordered by a fourth. Such a tribute to Kaumagraphs suggests that you too can end your trademark troubles by the use of Kaumagraph Dry Transfers. Write for sample markings and full information—Kaumagraph Co., 350-356 West 31st St., New York.
25,000 M
IN ACCEPTING THIS ORDER FOR DEFERRED DELIVERY IT IS EXPRESSLY UNDERSTOOD THAT SHIPPING INSTRUCTIONS FOR ENTIRE QUANTITY

KAUMAGRAPHS

taneously, and the bath becoming practically exhausted. Others require oxidation subsequent to dyeing in order to develop the color. A rinse in a very weak hydrosulphite bath is sometimes given after dyeing.

When heavy shades are dyed, the bath is not generally exhausted, so a standing bath is sometimes used and additions of color and hydrosulphite are made to give the desired dyeings.

Indanthrene colors sell for from 3 to 6 times as much as do direct cotton colors. The cost of dyeing is somewhat greater due to the necessity of using hydrosulphite and caustic with the Indanthrenes, while common salt is the only agent besides dye necessary with the direct cotton colors. The United States Tariff Commission's annual report for the year 1925, showed that the cost of dye alone in a man's woven-striped madras shirt is, for sulphur dye, ¼c; while the price of dye amounts to 1c when vat dyes are used. The average cost per yard of dyes in cotton piece goods, such as broadcloth, is 3½c when vat colors are used, and ½c per yard when direct colors are used.

Great quantities of Indanthrene colors are being used in dyeing goods where "fast" color is necessary. Much of the woven-striped cotton shirting and woven small-figured goods is dyed with these colors. The vat dyes are yet in their infancy and perhaps this has much to do with their not being used to so great an extent as the direct cotton colors. However, the public is demanding more and more that the cloth they buy be fast, both to light and to washing, so it is the writer's opinion that Indanthrene and other vat dyes will come into more general use in the near future. The last dye census showed that some 6,000,000 lbs. of vat colors were consumed in the United States in 1926, as compared to 1,900,000 lbs. in 1920.

There are no direct cotton colors which can approach the Indanthrene dyes with regard to fastness to light. The closest approach in washing fastness is shown by the developed direct cotton colors, and there are but few of these.

* * *

Keep in Touch with New Machinery

Technical Editor:

We have read your article on the replacing of obsolete equipment. The problem is to decide just when each particular machine is obsolete. This depends, first, upon new inventions brought out for the work the machine is doing; second, upon the economy of putting in a new machine, that is, labor and operating cost; third, upon the care taken of the machine during its life. It seems to the writer that this covers the field pretty well. The way to be in step with progress is to keep in touch with the machinery manufacturers and attend the textile shows that are put on in different sections of the country.

THE BRIGHTWOOD MFG. CO.
GEORGE H. SIMONDS, Treas.

Correspondence with Readers—Continued

More Letters on Reply to Bishops

Gentlemen:

The article in your April 16 issue, replying to the circular letter of a number of southern churchmen, is quite conclusive and seems to leave nothing more to be said. We doubt if these men are more competent to advise us about our business than we feel we would be to advise them as to theirs; furthermore, we believe that our business has made greater advances during the last 15 or 20 years than theirs has and it would seem to be in order for them to put their own house in order before trying to settle our difficulties.

J. G. Gregory, Secretary and Treasurer, *Elizabeth City (N. C.) Cotton Mills.*

Dear Sir:

I think your article in the April 16 issue of TEXTILE WORLD, in which you comment on the letter from the Methodist bishops, very truly presents the situation as it is and I cannot but feel that Bishop Cannon and his associates not only took a wrong step to correct any evils which may exist but that they were also made use of by others who had a cause to advance.

W. D. Briggs, President and Treasurer, *Caraleigh Mills Co.,* Raleigh, N. C.

Gentlemen:

We think the article by Douglas G. Woolf well written and that it stated facts.

It is our experience that people try to reform mill conditions when they are not familiar with same and certainly think it very necessary for those who are familiar with conditions to reply.

Pearl Rodman, Treasurer, *Rodman-Heath Cotton Mills,* Waxhaw, N. C.

Dear Sir:

Your reply to the southern bishops' letter in your issue of April 16 is 100% accurate. The only criticism I have to make is that you were altogether too mild in replying to their letter. These people evidently are not conversant with the truth even though they are bishops.

W. A. Mitchell, Treasurer, *Houston (Tex.) Textile Mills.*

Dear Sir:

I have read your article replying to the letter recently broadcast by the group of southern churchmen. The matter has been handled very admirably, indeed, and I personally desire to thank you for same. There is so much more that could be said in regard to this matter that it would take a book to answer all of the fallacies set forth in the "Bishops' Tirade."

Thos. H. Webb, Secretary and Treasurer, *Locke Cotton Mills Co.,* Concord, N. C.

Dear Mr. Woolf:

We have read your article regarding the bishops' letter and are glad that you have given this publication.

We are unable to understand why the textile industry is singled out for such unjust criticisms regarding their association with their employes. We believe that there is no industry that endeavors to get closer to their employes than the textile industry. Possibly in the old days there were some Simon Legrees in this industry the same as in others, and it is pretty hard for some people to divorce the old from the new.

We believe that the textile industry is capable of handling its own business and keeping its employes satisfied. It is not compulsory for any one to work in the mill because, if they are dissatisfied and capable, they can go elsewhere and this is one of the privileges of the American citizen.

Our mill is just three years old and we have some employes who worked on the construction of the buildings and are still on the payroll, so they must be satisfied.

J. P. Henderson, Vice-President and General Manager, *El Paso (Tex.) Cotton Mills Co.*

Dear Sir:

The bishops in our opinion got themselves into bad company, permitted themselves to be used as tools by some scheming people who are constantly seeking to do anything they can that will put money in their pocket regardless of the consequences to others. The bishops simply "swallowed" the dope and put out an article dealing with conditions with which they are not familiar. Their letter was simply ridiculous and does not of course carry any weight with any southern cotton manufacturer.

We think your answer to this letter particularly good. Your answer carries statements of facts, and shows that you are familiar with the real conditions as they exist. We appreciate your handling as you have.

Benjamin Russell, President, *The Russell Mfg. Co.,* Alexander City, Ala.

Dear Sir:

The greatest inconsistency of the "Professional Uplifters" is that they persist in attacking the problem after it is in process of solution, instead of using their efforts in the solution of the original problem. To anyone who has a mind, and makes any attempt to use it, it is apparent that the real economic problem of the South is not in the mill villages, since these people have come to the mill villages in order to better their previous condition of existence. There is no power on earth that can force these people to come to the villages, and they come voluntarily, because we offer them better conditions in every respect than those they have been accustomed to. Thus it should be apparent to anyone that if, as they contend, conditions are bad in the villages, which they are not, then it must follow that conditions are worse where these people came from.

If, therefore, the aforementioned "Uplifters" desire to find a field for their efforts, they should start at the bottom, or among the impoverished farmers of the southern States, who, since immigration has been restricted, represent the only cheap primary source of labor remaining in the United States. This is the real reason why cotton mills are moving South, and why the South is certain to grow very rapidly along industrial lines until this primary supply of labor is exhausted.

Being, as they are, the first step in the ladder of the industrial scale in the United States, the cotton mills have done more to educate and elevate the class of people that is passing through their hands than all other forces combined, not even excepting the churches. Primarily this service has not been given for philanthropic reasons, but a full conscientiousness of their duty to their fellow-man has actuated the mill executives of the South, and they have stressed the educating of their operatives against their own interests.

All thinking executives realize that they are educating their operatives away from the mills, and that some day, when the supply has been exhausted, we will be faced with the problem of a source of supply; but in spite of this realization every effort is being made to educate the operatives as well as and as fast as possible.

Jno. G. Chapman, General Manager, *Samoset Cotton Mills,* Talladega, Ala.

Dear Sir:

I have read the bishops' letter with a great deal of interest and also your comments. I think one of the biggest troubles about the people writing about the mill conditions is that most of them are absolutely ignorant of the true conditions. If the party who wrote this letter was to come to our village I could prove that he was very badly mistaken with reference to the statement which he is making.

We have two good churches in our mill village and we never have an operative here to need medical attention who does not get it regardless of the cost. They are sent to the hospital by our company physician and a trained nurse who is paid exclusively by the mill, and when our doctor or nurse tells us that they need hospital treatment the cost is never considered, nor do we consider how much they will be able to pay back, but our records show that they go to the hospital in Birmingham and get the very best of attention. This can be corroborated by several Birmingham physicians.

We have a community house, club house and other community centers here and I think that our village people who work in the mill are much better satisfied than lots of our city citizens.

Most of these criticisms of mill conditions are written by people who do not fully know the facts.

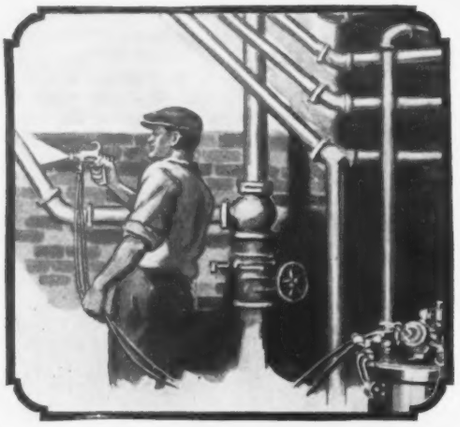
W. F. Strowd, Vice-President and Treasurer, *Buck Creek Cotton Mills, Inc.,* Siluria, Ala.

[*Editors' Note: Space limitations prevent the publication of all the letters received, commenting on this article.*]

ADVERTISING GIVEN TO SECTION BEARS FRUITS

Special to The Charlotte Observer

SHELBY, April 21.—J. C. Newton, secretary of the chamber of commerce, says he is receiving more inquiries than ever before from industrial men seeking locations for manufacturing plants of every description. Two inquiries have come from hosiery manufacturers as a result of an advertisement run by the chamber of commerce in The Textile World. Twenty-two inquiries have been forwarded to the local chamber of commerce by John Paul Lucas, publicity man of the Duke Power interests, these responses being the result of the first advertisement run by the Duke Power company in northern industrial publications, seeking to interest capital to build within the territory of the Piedmont Carolinas served by the Southern Power company.



Every Nook *and* Corner Painted

There are no hard-to-reach nor missed spots when painting with the DeVilbiss Spray-Painting System. Every inch of surface is thoroughly and uniformly coated, whether behind pipes, radiators and other obstructions or out in the open.

Further, painting the DeVilbiss way is five times faster than hand brushing—resulting in a net labor saving of 80%. It is the cleaner way to paint and does not interrupt mill operation.

Full facts will be gladly mailed. Address—

THE DeVILBISS CO. 236 Phillips Ave. TOLEDO, OHIO

New York
Chicago
Detroit
Philadelphia
San Francisco

DeVilbiss
Spray-painting System

Cleveland
Indianapolis
St. Louis
Milwaukee
Minneapolis
Windsor, Ont.

1827 One Hundredth Anniversary 1927

DIXON'S SILICA-GRAPHITE PAINT

provides better protection for exposed surfaces at lowest cost per year of service.

Long service records of from five to ten years are not unusual with Dixon's paint because of its wear-resisting pigment-flake silica-graphite. This pigment is inert, aids in preserving the elasticity of the vehicle, and resists dampness and corrosion of every sort.

Write for Booklet 48-B and Color card.

JOSEPH DIXON CRUCIBLE CO.
JERSEY CITY, NEW JERSEY

Boosts Morale—

A feature of hard maple flooring that mill men frequently overlook is its effect on mill operatives. This flooring is elastic. It definitely increases the productiveness of operatives who have to stand at their work. It tempers fatigue.

Specify this close-grained wood for long terms of service in your mill. It has proved ideal in many mills.

Prompt dependable service has always identified this organization. We shall gladly quote you on quantities either jointed or "D & M" standard thicknesses.

J. W. WELLS LUMBER CO.
Menominee, Mich.

Hard Maple Flooring

"BIGELOW" MAPLE FLOORING

The Product of

Michigan Hard Rock Maple

The Hard Maple from this section excels the product from any other locality in the hard, even texture that insures the greatest durability and finest appearance. The well known wearing qualities of Hard Maple have made this wood ideal for FACTORY FLOORS.

Our facilities enable us to give prompt service on large quantities

KNEELAND-BIGELOW CO.
BAY CITY MICHIGAN

NEW MACHINERY AND PROCESSES

Knitting Machine

Produces Jersey Fabrics in Variety of Patterns

A German knitting machine, manufactured by The Haaga Machine Co., is being introduced to this country by the Trick-O Machinery Co., 347 5th Ave., New York. It is claimed to give manufacturers of sweaters, bathing suits, and dresses an opportunity to produce fabrics and garments of jersey in a large variety of patterns. The machine is of the spring-needle type and the patterns are made by plating in different ways on different groups of needles. This can be done by having the sinkers (which form the loop) of two different shapes, so that the sinkers of one shape plate one thread on the top and those of another shape plate another thread on top. This reverse plating of the face yarn produces the pattern separately of the ground color.

The pattern changes are made by merely changing the order of the platers in the drums. In addition to the two-color plating, automatic stripers can be attached to make a colorful variety of patterns in addition to a comprehensive assortment of plaids. Tucking wheels can be attached easily to make all kinds of tuck-stitch patterns.

The machine can be made to produce most of the types of fabrics ordinarily knitted on circular spring-needle machines, such as looped fabrics, crepes, astrachans, etc. It is built in all gauges from 5 to 40 needles to one inch, and all cylinder sizes from 10 to 90 in. Because of the excellent quality of the materials used and the simplicity of construction, the depreciation due to wear and tear is said to be extremely small.

New Step-Back Relay

Overload Protection — Suitable Time Delay

A new step-back relay introduced by the General Electric Co. is designed for use in direct-current magnetic-control equipment to provide overload protection and to allow a suitable time delay before reset.

The upper part consists essentially of a normally closed contact whose open or closed position is controlled by a coil in series with the motor armature. Loads in excess of the relay setting cause this normally closed contact to open, dropping out the step-back and accelerating contactors and thereby inserting enough resistance to limit the motor current to 125% normal full load with stalled armature.

The lower part of the relay prevents the overload mechanism from resetting until after a definite time interval, during which time the motor has a chance to become stabilized. If after this definite time delay, conditions have again become normal and the motor current has decreased to a safe point, the overload mechanism resets and the control panel automatically accelerates the motor in the regular manner. However, unless the current decreases below a certain point, the relay will not reset. In this event the motor will have to be disconnected from the line and restarted from rest.

For Spun Rayon

Machinery for Opening, Carding, and Spinning

Experiments have been conducted by Platt Bros. & Co., Ltd., Oldham, Eng., to determine the type of machinery best suited to opening, carding, and spinning short-stapled rayon of uniform length. From the experience gained it was found that the fiber should be treated on lines similar to those employed for Sakellaridis cotton. It was found that no loss should take place because of the fibers being of equal length and containing no impurities. The machinery that has been developed as a result of this investigation is being marketed in this country by Leigh & Butler, 232 Summer St., Boston, Mass.

The machines for opening and lap forming consist of a hopper opener, hopper feeder, and picker with four-lap feeder, while the latter may be used also for doubling purposes. The picker is fitted with a striker cylinder instead of a bladed beater. Grid bars under the cylinder are dispensed with, and a plain metal sheet substituted. The usual grid bars between the cylinder and the cages are also displaced by a plain metal sheet.

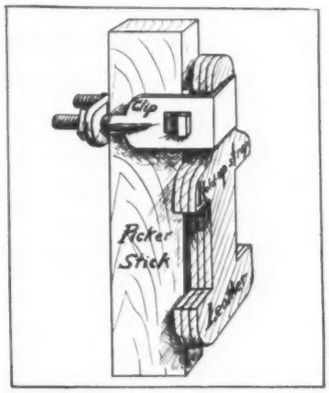
Special attention has been given to the revolving-flat card. For working a short-stapled rayon of definite length, it is fitted with fine card wire, as for Sakellaridis cotton, and a low production per hour is necessary if the best carding is to be obtained. Mote knives are dispensed with; consequently there is no loss of fiber under the licker-in. The flats are stripped by a patented arrangement of rollers which return the strips to the cylinder. This insures that there is no loss of valuable fiber during the carding operation.

It has been found, after much consideration and experiment, that the best point of the processes for mixing cotton with staple fiber is at the drawing frame. The drawing and roving frames, along with the ring frame and mule, are adjusted to suit the requirements of the length of staple being spun, and also to suit the mixing of a percentage of cotton, if desired.

Picker Stick Clip

Grips Strap Holding Lug Strap Without Injuring Stick

A metal clip designed to grip the leather strap which holds up the lug strap on a loom picker stick without injury to the stick itself has recently been placed on the market by Smith & Mann, 914 West York St., Philadelphia, Pa. Weakening of the stick is



Clip and Strap for Holding Lug Strap on Loom Picker Stick

avoided by elimination of the necessity for drilling holes in the wood. No use is made of screws, which might cause trouble by breaking off. The device is clamped securely to the stick by means of two bolts which are components of the clip itself. The metal of which the device is made is a high-grade, drop-forged steel, which should last, it is claimed, indefinitely.

Not only does the clip avoid injury to the stick, but it even adds strength to it, it is claimed, and makes possible the use of a stick that is split down the center. It has the advantage of quick installation, and close adjustment of the hold-up strap is possible. The makers guarantee that the clip will stay set when properly installed. Replacement of the hold-up straps can be accomplished quickly, it is said, with the result that loom stoppage and loss of production are reduced. There are no mechanical motions in the device to cause wear, and the full benefit of the leather hold-up strap is retained. The device in no way affects other parts of the loom. It is believed that the clip will introduce a reduction in maintenance cost.

RECENT TEXTILE PATENTS

Cotton chopper. 1,625,087. R. S. McClintock, Marianna, Ark. Assignor of one-half to W. S. McClintock, Marianna, Ark.

Fabrics, Loom for weaving pile. 1,624,993. A. W. Spink, Whitehaven, and D. Crabtree, Bradford, England.

Lace tipping machine. 1,625,522. F. E. Burlingame, Pawtucket, R. I. Assignor to Attleboro Braiding Co., So. Attleboro, Mass.

Loom. 1,625,156. A. Rigby, Paterson, N. J. Assignor of one-half to Phillip Diamond, Paterson, N. J.

Looms, Tension device for. 1,625,039. J. Lucas, Savannah, Ga. Assignor to Lucas-Lamborn Loom Corp., New York.

Machine for overcasting the edges of fabrics. 1,625,633. C. Thero, Chicago, Ill. Assignor to Union Special Machine Co., Chicago, Ill.

Silk and the like, Manufacture of artificial. 1,625,562. F. C. Neiderhauser and A. E. Sonderland, Roanoke, Va. Assignors to The Viscose Co., Marcus Hook, Pa.

Spinning machines, Oiler for. 1,625,488. J. R. Milson, Mansfield, Mass. Assignor of one-fourth to Chas. E. Milson, Providence, R. I.

Spinning, twisting, and winding machinery, Thread guide for. 1,624,934. E. Elliott and H. Roebuck, Shanghai, China.

Spools, reels, bobbins, and the like, Core for. 1,625,585. H. W. Archer, New Haven, Conn. Assignor to The Acme Wire Co., New Haven, Conn.

Stocking. 1,625,523. W. D. Butz, Norristown, Pa.

Textile and other materials, Waterproofing. 1,625,672. C. J. Moreton, London, Eng.

Warp drawing machine. 1,624,928. H. D. Colman, Rockford, Ill. Assignor to Barber-Colman Co., Rockford, Ill.

Yarn cleaner. 1,625,692. H. E. Van Ness, Elmira, N. Y.

Taking Static Out of Industry

(*Continued from page 79*)

cally devised to control an electrical condition. The Chapman process does not attempt to prevent the formation of frictional electricity, which nothing on earth will do in a degree approaching perfection. What it does is this: It instantly and completely "kills" any charge, great or small, regardless of its polarity, the instant the charge attempts to appear. It does it automatically so that the materials are delivered uniformly in a neutral and inert condition, regardless of temperature or atmospheric conditions, and consequently in the best possible shape for succeeding processes. Previous attempts to conquer the static menace had failed because the trouble was neither recognized nor understood as an electrical problem. And whether the right electrical agent would eventually have been found is doubtful except by going back to first principles, after the manner of the Chapman boy at play.

The fame of the new device spread far and wide. It quickly found its way into other lines of paper goods manufacturing and was introduced into the textile trades in the early days of the twentieth century.

The Western Cordage Co., Orange, Cal., has increased its production by the installation of 20 additional spindles, making a total of 50 spindles now operated.

LANE CANVAS TRUCKS

FIG.27

LANE TRUCK.

A light, easy running, smooth carrier, but built for heavy duty work. Lane casters equipped with string guards prevent clogging.

Have stood the exactions of all departments of the Textile industry. One of our latest types to become standardized is the Dye House Truck. All metal galvanized. A solution to the dye house problem.

FIG 49

TRUCK & BASKET FRAME.

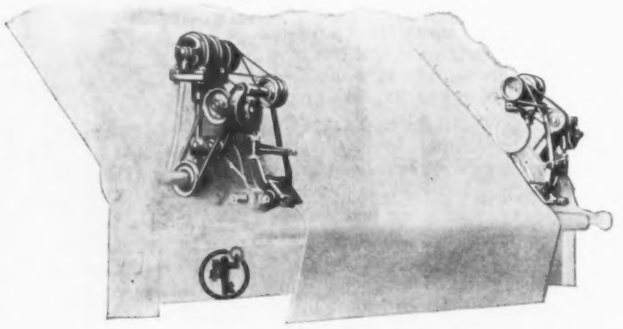
With slight modifications this cut illustrates the general construction of all Lane truck and basket frames. Lightness, flexibility, wonderful strength secured by this construction.

Write for Catalog No. 90

W. T. LANE & BROS.— Manufacturers —POUGHKEEPSIE, N. Y.

H. KRANTZ SOHNE - AACHEN

—NEW—



Automatic Electric Cloth Feed for Tentering, Carbonizing and Padding Machines

The Krantz Patented Electric Automatic Cloth Feeding Device

Instantly changes the position of the cloth.

The motors always run in the same direction, and a lever shifts either of two belts to obtain the necessary sideways motion.

The lever is turned to one side or the other by the cloth selvage itself.

Quick. Accurate. Simple.

Ask for Pamphlet No. 252.

See also CONSOLIDATED TEXTILE CATALOG

REPRESENTED BY **ALFRED SUTER** TEXTILE ENGINEER 200 FIFTH AVENUE NEW YORK

MILL NEWS

COTTON

New Construction and Additions

Winthrop (Maine) Mills Co. has awarded contract to O. D. Purington & Co., Providence, R. I., for building a five-story addition of brick and steel, 171 x 64 ft. It must be completed by Jan. 1. While it will be used as a warehouse for a time the new building will eventually be equipped with looms and the output of the plant greatly increased.

Slater interests, Webster, Mass., have purchased 400 acres of land near Marietta, S. C., where they will establish a mill and village to be known as Slater. The new plant will be operated by the Slater Mfg. Co. yet to be incorporated, of which H. N. Slater will be president. It will be equipped with 10,000 or 12,000 spindles and 700 looms for the production of sateens and broadcloths, some of the machinery to be transferred from Webster. Construction will begin this summer. Electric power will be bought. J. E. Sirrine & Co., Greenville, are the engineers in charge.

Kesler Mfg. Co., Salisbury, N. C., is building additions to its plant at a cost of $50,000.

Esmond (R. I.) Mills are building a two-story brick warehouse for the storage of finished goods.

Victor-Monaghan Co., Greenville, S. C. The Y. M. C. A. building of this company, which was completely destroyed by fire on April 23, is to be rebuilt, according to T. M. Marchant, president of the company.

Mills Mill No. 2, Woodruff, S. C. By an overwhelming vote the city of Woodruff last week voted to exempt the proposed $750,000 addition to this mill from municipal taxes, for five years. Though no announcement has been made, it is understood the management of Mills Mill No. 2 is contemplating letting a contract for the addition early this month.

***Dixie Mercerizing Co.,** Chattanooga, Tenn., has awarded contract for a mill addition and 60 new houses for operators to A. K. Adams & Co., Atlanta, Ga. The mill addition will be one and two stories high and approximately 363 x 100 ft. It will provide the necessary space for the installation of 16,000 additional spindles. The extension with its equipment and the new homes will represent an investment of about $800,000. Robert & Co., Atlanta, are the engineers.

Fact and Gossip

Russell Mfg. Co., Inc., Alexander City, Ala., manufacturers of cotton ribbed underwear and spinners of high grade underwear yarns, having offices for sale of yarns at 437 Chestnut St., Philadelphia, and which is now installing 1,000 looms in its Alexander City plant to make pajama checks, dobbies and specialties, will retire about June 1, 1927, from the cotton yarn business and at that time expects to close its Philadelphia office. The Farish Co., 100 Worth St., New York, has been appointed selling agents for the new products of the Russell Mfg. Co., Inc.

* Indicates previous mention of project.

Merrimack Mfg. Co., Huntsville, Ala., has completed improvement of its village started some time ago. Every sidewalk has been paved with concrete, the streets regraded, houses repainted and other improvements of substantial nature made. A clean-up campaign is now under way and every unsightly object that can be seen is being removed from the village.

James White Cotton Mills, Southern Mfg. Co. and **Mallison Braided Cord Co.,** Athens, Ga., are running their plants day and night.

Georgia Mfg. Co., Whitehall, Ga., is running its plant on full time schedules.

Pepperell Mfg. Co., Biddeford, Me., is increasing the production schedule at its local mill.

American Linen Co., Fall River, Mass., closed its plant for an indefinite period on Apr. 30.

***Ancona Co.,** Fall River, Mass. Wm. B. Hawes, representing the bondholders' committee of this company, bid in the property at public auction Apr. 30 for the bondholders at $110,000.

F. Burkart Mfg. Co., St. Louis, Mo., is arranging for the sale of 30,000 shares of preferred stock and 10,000 shares of common stock, the proceeds to be used in part in connection with an expansion program, including purchase of a mill at Philadelphia, Pa., recently announced.

Marlboro (N. H.) Weaving Co., manufacturers of woven labels, has sold its plant to the Ethelle Mfg. Co.

H. & F. Binch Co., Glens Falls, N. Y., is increasing operations by enlarging its working force.

The "Old Mill," Gastonia, N. C., said to have been the first textile mill building erected in Gastonia, together with 3,000 bales of cotton waste, was completely destroyed by fire on April 29. The mill was used as a warehouse, the cotton waste being owned by the Valley Mills, of La Grange, Ga. Damage to the structure was estimated at $25,000 and cotton loss, $120,000. The "Old Mill" was erected in 1886.

***Marshall Mill & Power Co.,** Marshall, N. C., which recently acquired the plant of the Capitola Mfg. Co., expects to start the production of cotton yarns there in about three months. Guy V. Roberts is president; D. W. Robinson, vice president; J. A. Anthony, secretary and treasurer.

American Lace Mfg. Co., Elyria, Ohio, is increasing production at its mill. Present output is said to be greater than at any time during the last two years.

John J. Kenyon Mfg. Co., Pawtucket, R. I. Charles Watson has been appointed temporary receiver of this company under bond of $5,000, on petition of Elizabeth Kenyon.

Dexter Yarn Co., Pawtucket, R. I. The plant formerly operated by this company will be offered for sale at public auction at noon May 11. G. L. & H. J. Gross, Providence, R. I., are the auctioneers in charge.

Woonsocket (R. I.) Falls Mill has purchased business property on River St., adjoining the mills. The property acquired includes a three-story brick building which has housed stores and shops, and was bought to provide a right of way to the recently completed addition to the mill and for possible future expansion.

Aragon-Baldwin Cotton Mills, Inc., Chester, S. C., which had one of the compartments of its warehouse gutted by a fire on April 22, has let contract to Colvin & Huggins, Chester contractors, for rebuilding the damaged section. Six hundred and forty-one bales of cotton were damaged.

Woodside Cotton Mills Co., Greenville, S. C. Contract for erection of a new unit for the grammar school at this plant will be let immediately. Plans for the new building, which will include nine classrooms as well as several special rooms, were completed sometime ago and are now in the hands of contractors for bids.

Santee Mills, Orangeburg, S. C., are installing 200 new looms to take the place of a similar number of looms that have been in use for many years. The new looms will produce 40-in. sheeting.

WOOL

New Construction and Additions

Goodall Worsted Co., Sanford, Maine, has made tentative plans for replacing its old mill buildings with new structures. It has not been decided when the work will begin.

Atlantic Mills, Providence, R. I., have awarded general contract to the J. W. Bishop Co., Providence, for erection of a four story mill addition to cost $100,000.

Jefferson Woolen Mills, Knoxville, Tenn., are erecting a large dye house, an office building, an engine room and a new weaving room, which will be 107 x 157 ft. and the largest of the additions. These new structures are of brick mill construction with steel sash and hardwood floors.

Fact and Gossip

J. Capps & Sons, Ltd., Jacksonville, Ill., has suspended operation of its woolen mills for an indefinite period, due, it is said, to the condition of the industry and the impending passage of the eight-hour bill, which is now before the Legislature.

Roubaix Mills, Inc., Clinton, Mass., which have been all but closed for nearly two months, report that business is improving and that there is taking place a gradual increase in the number of employes.

Guernet Mills, Lawrence, Mass. These mills, formerly located at Plymouth, Mass., started operations at Lawrence last week, after completing removal of their machinery from Plymouth and consolidating it with that purchased from the Glenbrook Worsted Mills, of Woonsocket, R. I. The Guernet plant now has an equipment of 60 looms, operating exclusively on pile and similar fabrics for women's wear, which are sold through Arthur Joel & Co., New York.

Northdale Woolen Mills, Inc., Northboro, Mass. Miscellaneous stock and scrap in the storehouse of this plant, now closed, was sold at public auction on April 29 to the Taunton (Mass.) Silk Fibre Co. for $700. The latter company has an execution against the Northdale mills for $900 and bid in the property to satisfy it.

Palmer Mass., Carpet Mills of the M. J. Whittall Associates, have curtailed operations to three days a week until further notice.

Bigwood Woolen Co., Spencer, Mass., has curtailed operations to four days a week without reducing the number of employes.

Spencer Woolen Co., Inc., Spencer, Mass., which has been shut down for several weeks still continues closed.

Baltic Mills of the American Woolen Co., Enfield, N. H., have resumed operations on a curtailed basis, following about a month's shut-down. A reduced working quota is being employed.

Mohawk Carpet Mills, Amsterdam, N. Y., have purchased property on Elk St. from Abram V. Morris which will be held for future expansion.

Stephen Sanford & Sons, Amsterdam, N. Y., are again running many departments overtime following curtailed schedules.

***Saguer Worsted Mills, Inc.,** Philadelphia, Pa., which recently purchased the Henrietta Worsted Mills, Wayne Junction, are capitalized at $30,000; Victor Samuels is president; Benjamin Samuels, treasurer; Thomas E. Guerin, manager and buyer. They will produce woolens and worsteds, having an equipment of 40 broad looms. Product will be sold direct.

Airdale Worsted Co., Inc., Central Falls, R. I., has been incorporated with a capital of 500 shares of stock without par value, to continue operation of the plant of similar name. The incorporators are Arthur C. Slater, Pawtucket, R. I.; Arthur Slater, Arthur E. Cooper and Sam Leach.

Snowden Worsted Mills, Providence, R. I., will resume operations under the direction of the estate of the late James W. Greaves, for many years president of the Snowden mill. The plant's name will be changed to the Greaves Worsted Mill and it will be managed by James W. Greaves, Jr.

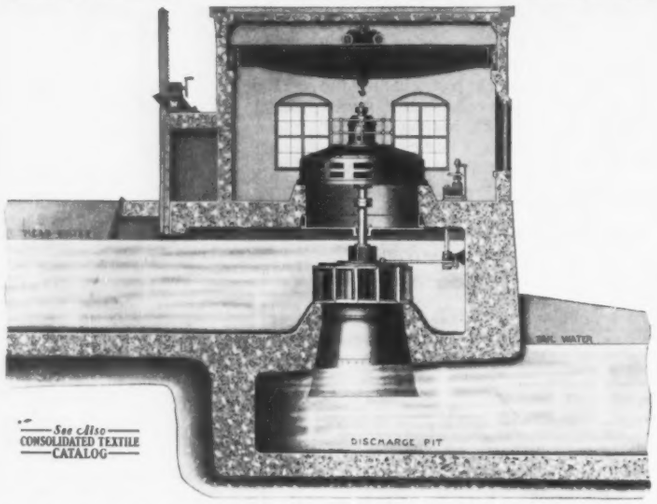
I. Barnett Woolen Mills Co., Milwaukee, Wis., has bought the property at 200 Muskego Ave., now occupied, for about $100,000. The land has a frontage of 200 ft. on Muskego Ave., and is about 800 ft. deep. It has been owned by the International Harvester Co., with the new owners leasing it. There are no plans for expansion at present, according to Isaac Barnett, president of the purchasing company.

Burlington (Wis.) Blanket Co. has consolidated two of its plants, locating the new establishment in Milwaukee. This concern has been operating branches at Milwaukee and Hartford, Wis., for some time. These two plants have now been combined in a three-story building at Clinton and Oregon Sts., Milwaukee, recently purchased by the company. The entire output of the new plant will be overcoats and top coats, while the Bur-

LEFFEL

TURBINE WATER WHEELS

HIGH SPEEDS, HIGH POWERS, HIGH EFFICIENCIES



LOW HEAD, HIGH SPEED, VERTICAL DIRECT CONNECTED UNIT

WE WILL FORWARD BULLETINS UPON REQUEST

THE JAMES LEFFEL & CO., SPRINGFIELD, OHIO

BRANCH OFFICES:

NEW YORK, N. Y. ..... 39 Cortlandt St.
BOSTON, MASS. ..... 80 Boylston St.
ATLANTA, GA. ..... Fourth Nat'l Bank Building
MINNEAPOLIS, MINN. ..... Plymouth Building
LANCASTER, PA. ..... Woolworth Building
PETERBOROUGH, ONT., CANADA ..... William Hamilton, Ltd.

The Babcock & Wilcox Co.

85 LIBERTY STREET, NEW YORK

ESTABLISHED 1868

Water Tube Boilers
Steam Superheaters
Chain Grate Stokers

BRANCHES

BOSTON, 80 Federal Street
PHILADELPHIA, Packard Building
PITTSBURGH, Farmers Deposit Bank Building
CLEVELAND, Guardian Building
CHICAGO, Marquette Building
DETROIT, Ford Building
CINCINNATI, Traction Building
ATLANTA, Candler Building
PHOENIX, ARIZ., Heard Building
NEW ORLEANS, 344 Camp Street
HOUSTON, TEXAS, Electric Building
DALLAS, TEXAS, Magnolia Building
DENVER, 444 Seventeenth Street
SALT LAKE CITY, Kearns Building
SAN FRANCISCO, Sheldon Building
LOS ANGELES, Central Building
PORTLAND, ORE., Gasco Building
SEATTLE, L. C. Smith Building
HAVANA, CUBA, Calle de Aguiar 104
SAN JUAN, PORTO RICO, Royal Bank Building
HONOLULU, H. T., Castle & Cook Building

This Automatic Hand Saves Fuel

LET the Vigilant be your boiler tender. Let it be the hand that regulates the flow of the feed water. It's decidedly more efficient in regulating than the most skilled attendant.

It holds the water level constantly at the efficiency point — never lets it slip below — or jump above. Only as the water becomes steam, does it feed in fresh — slowly, steadily.

That's where the fuel saving is effective. There's no sudden on-rush of chilling water to demand extra fuel. In every installation this *automatic* hand is saving from 6 to 15 per cent in fuel over the *human* hand method.

Write for our illustrated booklet. It explains the Vigilant interestingly.

The Chaplin-Fulton Mfg. Co.

28-34 Penn Ave., Pittsburgh, Pa.

"Not a Single Failure"

More than 100,000 in use — prove VIKING leadership

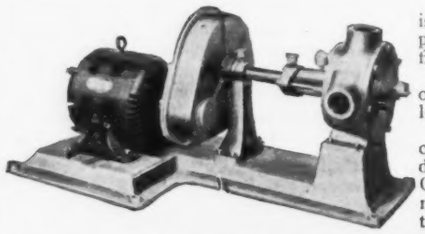
IN every industry and in every state there are thousands of Vikings.

That one pump should attain such uniform and widespread favoritism is due to a single dominating fact — the Viking service record.

Time and time again enthusiastic owners of Vikings have forwarded us voluntary records on maintenance costs. Such figures on the Viking have shown up so remarkably low that these Viking users could not refrain from comment.

Viking service and Viking popularity are not accidental.

When you buy a Viking you obtain a pump with the improved Rotary principle. Only two movable parts. Positive suction and even flow. Greater capacity and lessened operating costs.



These Viking characteristics have made this one pump outstanding in all fields.

Why take a risk with any other selection? Why not learn the Viking facts first?

We have an illustrated catalog to mail you. It depicts all Viking types. One will suit your requirements. Send for the book today.

VIKING PUMP COMPANY

Cedar Falls, Iowa **Walkerville, Ontario, Canada**

VIKING PUMPS

Mill News—Continued

lington plant will continue the manufacture of all products now made there.

Lockwood Co., Ltd., Brantford, Ont., Canada, is the name of a new company which has taken over H. Lockwoods, Ltd., recently liquidated. Herbert Lockwood continues as manager.

Guelph Felt Co. Ltd., Guelph, Ont., Canada, has been incorporated with a capital stock of $50,000.

Renfrew Woolen Mills, Renfrew, Ont., Canada, have closed down their mills for an indefinite period.

KNIT

New Construction and Additions

***Cooper-Wells & Co.,** Decatur, Ala., are making good progress in the construction of their new mill building and expect to complete it by July 1. Full fashioned machinery for the plant is now being made in Germany and will be shipped here early in the summer.

***Gardiner-Warring Co.,** Florence, Ala., has its new mill well under construction and the machinery will be shipped shortly from the old plant in Amsterdam, N. Y. The plant consists of main mill 140 x 65 ft., three-story high, which will be equipped with 130 knitting and 230 sewing machines. There will be separate dye and bleach houses, and boiler room 110 x 35 ft. The buildings are of mill construction, brick and steel. The plant will be operated by electric power furnished by the Alabama Power Co. and will employ about 400 operatives. Robert & Co., of Atlanta, are the architects and engineers. The officers are: W. C. Jones, president; C. F. Swanker, vice president; J. T. Flagg, secretary-treasurer; W. W. Scott, superintendent. They will manufacture the same line of goods as at Amsterdam, viz., high grade knit underwear for men and boys, also rayon garments. They will sell only to jobbers, through Wm. C. Jones & Co., Inc., New York.

***Emple Knitting Mills,** Bangor, Me., are now manufacturing sweaters and fancy knit goods at 27 Columbia St., where they have an equipment of six latch needle knitting machines and six sewing machines. Joseph Emple buys 2-20s worsted and 2-12s wool yarns.

Famb Knitting Co., Millville, Mass., has installed eight additional 30-inch knitting machines.

***J. C. Roulette & Sons, Inc.,** Hagerstown, Md., who recently leased a building at Boonsboro, Md., will transfer 25 sewing machines from Hagerstown to the new mill which will be run as a branch.

***Ray Hosiery Mills, Inc.,** Asheville, N. C., recently organized with capital of $50,000, have started the manufacture of men's hosiery, equipped with 50 knitting machines, ten ribbers, eight loopers, dyeing, bleaching and finishing machinery.

May Hosiery Mills, Inc., Burlington, N. C., have decided to build an addition to their plant and to install equipment which will approximately double the present capacity. Plans are now being prepared by J. E. Sirrine & Co., engineers, Greenville, S. C.

***Rogers Hosiery Mill,** Burlington, N. C., plans to start the manufacture of men's fancy hosiery in about two weeks with an equipment of nine loopers and 40 full fashioned knitting machines. Electric power will be bought.

Victory Hosiery Mills, Burlington, N. C., have placed an order for 100 additional machines which are expected to arrive here within a few days.

***Hudson Silk Hosiery Co., Inc.,** Charlotte, N. C. New equipment now being installed in this mill consists of six additional full fashioned knitting machines and four sewing machines.

***Greensboro (N. C.) Full Fashioned Hosiery Mill.** Construction work on the new building for this company is well under way. The steel and brick work is well advanced and plans now call for the mill to be ready for operation about July 4.

Penns Valley Hosiery Mills, Philadelphia, Pa., expect to start their Mill No. 2 in leased quarters at 2028 E. Westmoreland St., about May 15. This firm also operates a mill at Millheim, Pa. They make women's 260–300 needle seamless silk hosiery. It is possible this concern will in the near future add several full-fashioned machines to their equipment.

***Colonial Knitting Mills, Inc.,** Philadelphia, Pa., has the Austin Co. of New York and Philadelphia, staking off the lines for the foundation of the first unit of their proposed plant at Mohnton, Pa., and has begun excavating.

Glory Knitters, Pottstown, Pa., have started the manufacture of women's rayon underwear in leased quarters at South & Hanover Sts. The company is capitalized at $50,000; M. E. Pierson is president and H. C. Gingrich, treasurer.

***Eagle Knitting Mills,** Milwaukee, Wis., have completed negotiations for a new site for their mill at Reed and Virginia Sts., and work will be started immediately on a four-story concrete building, which will occupy the entire lot, 100 x 140 ft. Plans for the building are being prepared by the Federal Engineering Co., Milwaukee.

***Jupiter Knitting Co.,** Milwaukee, Wis., recently organized with capital of $25,000, has started manufacturing at 2413 Fond du Lac Ave. Electric power is purchased. P. H. Schmidt is president and Arthur Meissner, treasurer.

Atlantic Underwear, Ltd., Moncton, N. B., Canada, has recently completed the erection of a three-story, 42 x 50 ft. extension. Additional knitting machines will be installed at once.

Penmans, Ltd., Paris, Ont., Canada, have plans in progress for the construction of a new mill addition, reported to cost in excess of $175,000 with equipment. J. H. Moore, London, Ont., is architect.

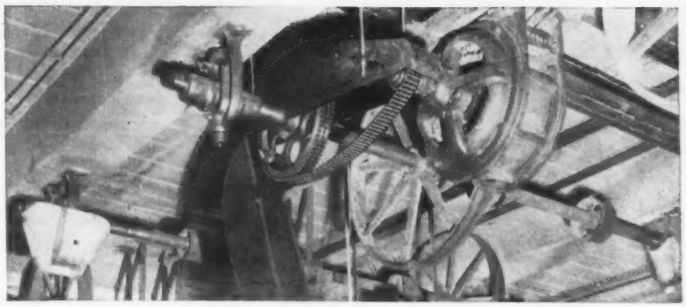
Fact and Gossip

Bridgeport (Ala.) Hosiery Mills, which resumed operations Feb. 14 with a small number of operatives, have increased the number of employes to 75. It is expected that full capacity will be reached soon.

Mercantile Knitting Mills, Brooklyn, N. Y., have made an assignment to Max Kaplan, 33 E. 12th St., Brooklyn.

Rex Knitting Co., Little Falls, N. Y., has been reorganized and incorporated under the name of the Rex Knitting Co., Inc., to continue the manufacture of sweaters and other knit goods. The certificate filed with the county clerk shows the directors are Edwin I. Stinson, Frank Senior, Jr., D. H. Burrell, Raymond E.

* Indicates previous mention of project.



Diamond Roller Chain on a typical lineshaft drive in a textile mill. 16½ H.P. Motor —1189 and 265 r.p.m. Infrequent repair—minimum attention—these attributes of a Diamond Chain Drive recommend it for the "out-of-the-way" installation

Rugged, Simple, Compact Roller Bearing Efficiency in Power Transmission

TAKE away your drives—your motor-to-line-shaft drives, direct motor drives, drives from line shafts to machines, drives within the machines themselves—what would become of industry? Your own production? An exaggerated thought, true enough—and yet the exaggeration emphasizes its importance. Your drives are the vital points of your production.

Cut their efficiency in half—take away half the value of every drive—what happens to your power consumption?—to your overhead? * * *

Or, increase the efficiency of those same drives, increase their dependability, their years of life. You save maintainance, save power, save wasteful production delays—save in a dozen ways that mean a material reduction of overhead—a material increase in profit.

These are the two ways to look at a problem that is so vital to industrial success it should never be out of mind.

Think of Diamond Roller Chain when you're thinking of ways to cut your overhead and increase the efficiency of your own drives. Call a Diamond Chain engineer into consultation.

EFFICIENT ON SPEEDS AS HIGH AS 3600 R.P.M.

Rolling Surfaces ROLLING AT POINTS OF CONTACT *Prevent Wear*

Become immediately better acquainted with Diamond Roller Chain as used in the Textile Industry by reading the booklet pictured below

DIAMOND CHAIN

Free Power!

Send for This Book

Really, that's what it amounts to—any power you can save by increasing transmission efficiency. The roller link construction of Diamond Roller Chain so reduces friction that a 98 to 99% efficiency is possible on every drive. What is the present efficiency of the various drives in your plant? Increase it and you'll save money; increase it and you'll be able to add more units without additional power.

Typical Textile field drives are pictured in the booklet shown at right—suggesting the ways you could use Diamond Roller Chain to your profit. The coupon is for your convenience in obtaining a copy

BRANCHES:
Chicago—6 No. Michigan Ave.
Cleveland—855 Leader-News Bldg.
Greenville—408 Masonic Temple
Philadelphia—1011 Chestnut St.

REPRESENTATIVES:
Birmingham—Moore-Handley Hardware Co.
Boston—Union Gear & Machine Co.
New Orleans—C. T. Patterson Co.
New York—R. M. Barwise, 18 Hudson St.

TRADE ◇ MARK

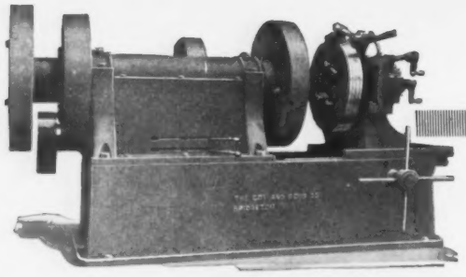
Look for the Diamond on the Link

TEAR ALONG THE ROLLERS

You may send a copy of your booklet to the address below:

Name.....
Firm.....
Address.....
TW

The DIAMOND CHAIN & MFG. CO., Indianapolis, Ind.



500 Industrial Concerns use Cox Pipe Machines

Cox Pipe Cutting and Threading Machines are used in all lines of commerce and industry, from Railroads to Textile Plants,—from Shipyards to Paper Mills. In fact, several Cox Machines are operating in South Africa, deep below the Earth's surface; others are operating on Ship-board.

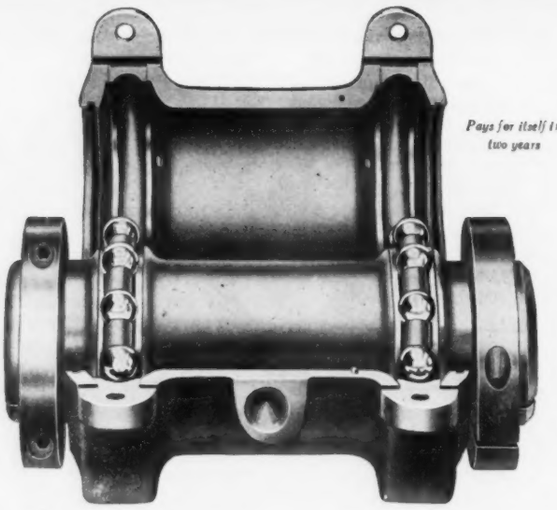
There's a Cox Machine for every purpose,—from ¼" to 24" pipe sizes, in Belt, Motor, Steam or Gasoline Engine Drives, Incidentally, Cox Machines do away with the necessity of resetting Chasers for each pipe size.

Send for Bulletin describing the New Class "E" Machine, shown above.

PIPE CUTTING AND THREADING MACHINES. SCRAP METAL BUNDLERS

The COX and Sons Company

BRIDGETON, NEW JERSEY ESTABLISHED 1869



Pays for itself in two years

C. H. CHAPMAN SPLIT BALL Bearing for Line Shafting

YOU can readily install a C. H. Chapman without taking down the shafting — even when you place the bearing in the center of the line. . . There's more power for the line shaft because friction is practically eliminated; no "hitch" to get up speed. . . . As for lubrication, a charge of high grade vaseline once a year suffices. No dripping oil to spot your goods. . . The C. H. Chapman Bearing pays for itself within two years. *Write for details.*

Split Ball Bearing Corp., 170 Summer St., Boston, Mass.

R B F

BALL AND ROLLER BEARINGS

Quality is the dominant feature of R B F Bearings. No finer steel, workmanship, or limits of accuracy are used in any bearing than are used in R B F s.

The R B F line includes deep groove and self-aligning ball-bearings in single or double row, thrust bearings and roller bearings. All are made to the same high standards of excellence and can be relied upon to give the utmost service.

We are prepared to give prompt delivery and will be glad to discuss any bearing problem with you. Write for full information.

GENERAL BEARING COMPANY, INC.
33 West 60th Street, New York

DETROIT
11-252 General Motors Bldg.

CLEVELAND
1925 East 55th Street

Of What Does This Remind You?

SUPPOSE that you had on hand when your first tap was broken a commercial device built specially to remove the broken pieces of tap, a commercial device not a home-made article, would you not have saved a great deal of time?

Write Us for Information

The Walton Company
310 PEARL STREET HARTFORD, CONN.

Mill News—Continued

Cooper, of Little Falls, and Herman Heller, of New York.

J. G. Parks, president of the White-Parks Mills Co., Concord, N. C., has bought three two-story brick buildings in Mount Pleasant, N. C., and it is reported that he contemplates establishing a hosiery mill here.

Northern Knitting Mills, Philadelphia, Pa., have been adjudicated an involuntary bankrupt by the U. S. District Court here. An assignee's sale of the stock and equipment of this plant was held March 21 at the premises, 4100 Torresdale Ave., where they formerly manufactured bathing suits.

John Blood & Co., Boyertown, Pa., are installing machinery for the production of full fashioned hosiery, according to a report. This firm has heretofore manufactured seamless hosiery exclusively.

***Kadiac Knitting Mills, Inc.,** Manheim, Pa., have been incorporated with capital stock of $60,000. This company has taken over the mill formerly operated by the Shillington Hosiery Mills, which succeeded the Manheim Hosiery Co. Dr. Harry S. Ziemer is president; Harvey K. Stork, vice president; Harry K. Stork, secretary and treasurer.

Parknit Mfg. Co., Inc., Woonsocket, R. I., has been incorporated to manufacture textiles with an authorized capital of 250 shares of stock of no stated par value. The incorporators are Edward Bagguley, 399 Providence St., Woonsocket; Charles F. Murphy, George L. Murray and T. B. Woods.

Allen Silk Mills, Hanover, Ont., Canada, are doing a splendid business in the former plant of the Hanover Converters, which they purchased last year. They still maintain their plant at 43 Davies Ave., Toronto.

***J. Henry Peters Mfg. Co., Ltd.,** Toronto, Ont., Canada, is now running the plant formerly operated by the J. Henry Peters Co., and recently purchased by F. B. Hayes. The new company is capitalized at $300,000; Mr. Hayes is president and A. F. Sonter, treasurer.

SILK

New Construction and Additions

Maxwell Silk Throwing Co., Muncy, Pa., has engaged Nicholas E. Fisher, Williamsport, Pa., architect and engineer, to prepare plans for a proposed one-story mill building.

Fact and Gossip

United States Silk Mill, Inc., Manchester, N. H., is running on a maximum capacity schedule of 144 hours per week.

Ellgo Silk Co., Paterson, N. J., has been formed with a capital of $125,000, to operate a local broad silk mill. The company is represented by Samuel Goldy, 1 Clinton St., Paterson. The incorporators are Frank Stein, John A. Murphy and Alexander Josephson.

Franklin Silk Throwing Co., Paterson, N. J., recently formed with a capital of $125,000, to operate a local mill, will be represented by Charles Turndorf, 515 Fabian Bldg. The incorporators are Alexander Josephson, Max Jacobs and Herman H. Moskowitz.

*Indicates previous mention of project.

Holzman Silk Mfg. Co., West New York, N. J., has sold its three-story mill at Park Ave., 13th to 14th Sts., 126 x 200 ft., to the Aeroil Burner Co., Inc., Union City, N. J., for a stated consideration of $110,000. The new owner proposes to establish its main factory at the new location.

Pioneer Woven Label Co., Hanover, Pa. William Weiss has been appointed receiver for this company under bond of $250.

***Saracenic Silk Mill,** Central Falls, R. I. With the filing of the final report of Raymond J. McMahon, receiver for this company on April 27, a decree was entered discharging the receiver and dissolving the corporation.

RAYON

New Construction and Additions

Commercial Fibre Co. of America, Inc., Passaic, N. J., will soon take bids on general contract for a new one-story addition on Central Ave., to be brick and concrete, with slag roof. A. L. Vegliante, Garfield, N. J., is architect.

Fact and Gossip

American Glanzstoff Corp., Dover, Del., has been incorporated under Delaware laws with a capital of $7,000,000 and 300,000 shares of no par value. The papers were filed by the Corporation Trust Co. of America, giving the purpose of the concern as that of engaging in a mercantile, manufacturing and trading business. The incorporators are T. L. Croteau, A. L. Miller and T. L. Fray, all of Wilmington, Del. The incorporation of this company follows rumors that the Vereinigte Glanzstoff Fabriken, Germany rayon manufacturers, were planning the erection of an American plant. Glanzstoff yarns are sold in this country through Wolf, Strauss & Co., Inc., New York.

DYE, BLEACH AND FINISH

New Construction and Additions

Diamond Silk Dyeing & Finishing Co., West New York, N. J., has asked bids on general contract for a plant addition at 690 Johnson pl., to cost about $60,000, with equipment. Charles H. Miller, West New York, is architect.

National Dye Works, Burlington, N. C., plan to spend approximately $100,000 on a building program to enlarge their plant. Contract for the enlargement will be let as soon as officially approved by the board of directors.

Fact and Gossip

***Sturbridge Fininshing Co.,** Fiskdale, Mass., which had planned to start operations on Apr. 20 has been delayed in getting the plant ready to begin work.

Premier Dyeing Co., West New York, N. J., recently formed with a capital of $100,000, to operate a local silk dye house, will be represented by Hyman Rosenblatt, 414 18th St., West New York, one of the incorporators. The other incorporators are Samuel Steinberg and Harry Joelson.

***New York-Rhode Island Finishing Works, Inc.,** Arcadia, R. I., recently incorporated with capital of $250,000, have taken over the former Nutex Mills, Inc.

Teamwork

MERGERS, and rumors of mergers, fill the air. But the best union we know is that of knitting machines and Torrington Needles

This combination means teamwork—and that means top quality production. And that's the best padder of profit columns we know of

The red box with the green label

The TORRINGTON COMPANY

Torrington, Conn., U. S. A.

BRANCHES:

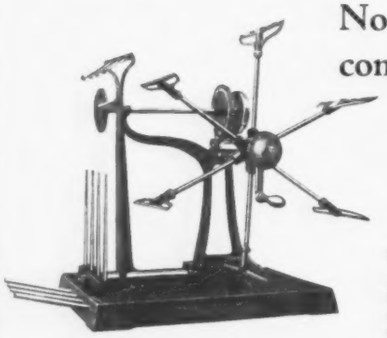
THE TORRINGTON COMPANY, CHERRY AND JUNIPER STS., PHILADELPHIA
C. B. BARKER & CO., LTD., 140-144 W. 22ND STREET, NEW YORK
LOS FABRICANTES UNIDOS, 964 CALLE BELGRANO, BUENOS AIRES

FACTORIES AT:

TORRINGTON, CONN.
AACHEN, GERMANY
COVENTRY, ENGLAND
UPPER BEDFORD, CANADA

See also CONSOLIDATED TEXTILE CATALOG

Accurate Testing for Stretch, Strength and Number



No guess work in computing results

You know how accurately fine yarns must be reeled and measured when being tested for strength, stretch and number. Do you also know how well Brown & Sharpe reels are capable of doing this work?

Automatic Feed Motion lays the yarn flat, and yarn guides and spindles are kept in line while the yarn is being reeled. This ensures accurate reeling.

Nor is there any guesswork in computing results when you employ this machine. The exact number of yards reeled is indicated on an easily read dial. Striking of bell warns operator a few turns before zero of dial reaches index point.

Make a mental note now to send for our booklet "Tables and Directions for Use with Yarn Reels and Scales"—a copy will be sent free on request.

See also CONSOLIDATED TEXTILE CATALOG

BROWN & SHARPE MFG. CO.
PROVIDENCE, R. I., U. S. A.
YARN AND ROVING REELS AND SCALES

Two Important Gains in Using the Power Piano Machine

(1) It saves fatigue

Bodily fatigue dissipates attention and breeds costly errors.

(2) It speeds the work

An operator can read design and press keys much more rapidly than he can exert leg-muscle effort hour after hour. You pay high wages for the mental service of card-cutting, not the labor. Mind outstrips muscle. Why retard it with needless labor?

Power Piano Machine

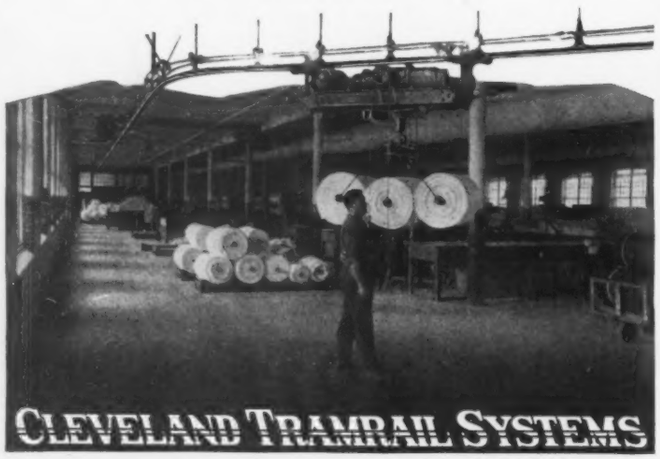
Catalogue and quotations in exchange for a cut sample of your jacquard card.

JOHN ROYLE & SONS
PATERSON N. J.

MOVING is a part of MAKING

More than half the time of machine operators and helpers is spent in moving materials—beams, rolls, bales or cases—from one machine or one department to another. Moving is strictly a part of the *manufacturing process*—you should equip your mill with modern machinery to reduce the cost of this important part of the process.

Cleveland Electric Tramrail
Division of
The Cleveland Crane & Engineering Co.
Wickliffe, Ohio



CLEVELAND TRAMRAIL SYSTEMS

THE CARBONIZING PROCESS, by Durnville and Kershaw $4.00

New Edition, revised and enlarged

Describes and illustrates all modern methods of carbonizing stock and cloth. The standard work for chemists, manufacturers, foremen and operators.

WOOL SUBSTITUTES, by Roberts Beaumont $3.00

Covers the entire range of the subject, including sorting, grading, grinding, carbonizing, blending, yarn preparation and cloth manufacture. Chapters on artificial wools, noils and flocks. Cloth; 204 Pages; 53 Illustrations.

Above books sent postpaid to any address on receipt of price

BRAGDON, LORD & NAGLE CO.
Book Department
334 FOURTH AVE., NEW YORK
Send for complete catalog of textile books, free

KNIT GOODS

Study of Children's Ribbed Hosiery

The research associate of the National Association of Hosiery and Underwear Manufacturers is making a study of children's five-eighths, three-quarter and seven-eighth lengths ribbed hosiery.

These terms, intended to define different types of hosiery for children, have come into common usage in the hosiery trade, yet they have no definite meaning, particularly as to length. The exact size of any one of them is pretty much a matter of individual determination.

The association has sent a questionnaire to a selected list of its member mills. The results of this questionnaire will be carefully studied and classified, and it is expected to yield information of great value to the hosiery industry as a whole.

The questionnaire submitted to manufacturers on this subject is as follows:

"A survey of the hosiery market readily shows that the terms 5/8, 3/4 and 7/8 children's and misses' ribbed hosiery have no definite meaning, especially as to length.

"Your association, believing that standard definitions would be desirable, has requested this department to study this situation with this in view.

"Your understanding of the following points, as well as any other suggestions that you have on this subject, would be very helpful in aiding us to fulfill this request:

(a) How did these terms 5/8, 3/4, 7/8 children's and misses' ribbed originate?

(b) How are the terms 5/8, 3/4, 7/8 children's and misses' ribbed hosiery related to the age of the child?

(c) What field does each of these types cover?

(d) Do such factors as height of child, fashion and locality affect these styles? Any other factors?

(e) If you make these types what are your standard lengths for each size?"

Establishes Corset Fabric Department

Corset and brassiere fabrics will be handled in a new cloth department established by The Benson Co., of 100 Worth St., New York city. This new department, which will be known as the S. G. Auerbach Dept., will cater exclusively to the needs of corset and brassiere manufacturers offering them a full range of fabrics, including coutils, jeans, interlinings and brocades in rayon stripes and fancies. It will be in charge of Selwyn G. Auerbach, who for the last six years has been identified with Edwin Wasser, Inc., and who is well known to the corset and brassiere trade. Mr. Auerbach will be the general manager and will also call on the trade in person.

* * *

Weather Retards Underwear Sales

Manufacturers Hope for Good Duplicate Business at Mid-Year; Otherwise Predict Shut-Down

WEATHER seems to be the dominant handicap to free business in underwear at the moment. It is true that the principal activity during the last several weeks has been on spring underwear. But even this has fallen off materially and it is felt that until more seasonable climatic conditions are experienced the trade can not expect anything but a humdrum situation without evidence of interest in merchandise at any price. As an illustration of the latter statement, a selling agent declared this week that he had a comparatively small quantity of spring underwear seconds. Perfect goods of this line sell for $1.50 at retail, and to the jobber at $8.50. The best offer he could get, and this was only tentative without any particular eagerness on the part of the buyer to trade, was $4.50. Of course the sale was not made. In other words, price today does not affect the buyer in any way. As a matter of fact the majority are not desirous of seeing goods at a lower figure because of the influence such merchandise may have on the stocks they already own.

Duplicates Depend on Retailer

As far as fall business is concerned, although certain agents, particularly of branded goods, claim they are receiving a fair amount of duplicates, the general run of lines are in a state of suspended animation. The future depends almost entirely on the success of the jobber in his canvass of the retail trade. A few have sent their men out with fall lines and are said to have met with fair success. The majority, however, are still to show fall merchandise and it is difficult to predict what the results will be. It is certain that the retailer today is not selling spring underwear and therefore is not likely to be in a receptive mood when canvassed for his fall orders. One of the leading mills making both spring and fall goods, is said to have sold 50% of its product for the year. A selling agent for this line admits that if duplicates are received in June, July and August, there will be no doubt but that the mill can run full—and it has a large production. If, however, the hoped-for duplicate business fails to materialize there will be a gap before the fall activity which will necessitate curtailment for a more or less prolonged period. If this condition obtains with one of the most prominent manufacturers in the country it is likely to be reflected in the situation of others. Therefore, the majority look forward with a good deal of anticipation and possibly some misgivings to the middle of the year as a time which will determine just what their status for the year is to be.

Flood Effects Minimized

While no one is willing to doubt the very material damage caused by floods in the southern States, the effect upon the textile trade and especially upon the underwear business is not expected to be particularly disastrous. Damage to farms and farm products is doubtless great, but in centers of population the effects are not substantial and it is believed business will go along as usual in the majority of instances. Reports from certain important distributors feeding the flooded district, indicate that they feel no apprehension about the future and that although State funds may be tied up as a result of the necessity for reestablishing those stricken by the flood, to their former condition, general demand is expected to continue uninterruptedly. No reports of poor collections from this district are heard, and as a matter of fact an increased demand is expected for many classes of merchandise once the waters have receded and individuals return to their wonted occupations.

Rayons and Nainsooks

A steady request continues for lines of women's rayon garments with every indication that this division will continue one of the most satisfactory in the market. There are doubtless certain lines in the hands of jobbers and retailers which will not sell because they are not made right and will not give satisfaction. But this is always true, especially of a comparatively new product, and does not militate against the success of properly manufactured merchandise. There seems to be a growing feeling that nainsook underwear, as such, is not increasing to the extent that many could desire. This is doubtless due to the many factors in the business, some of them irresponsible and others without knowledge of proper manufacturing or selling methods. The element of competition is especially noticeable in the endeavor to provide something different from the plain nainsook union suit or shirt and drawers. A combination knit shirt and running trunk is an example of this and there is every evidence that the staple lines will be more or less hurt by novelties of this character which give every evidence of becoming staples in turn.

Newport (N. Y.) Textile Co. is now operating at about capacity in all departments.

Hatheway & Reynolds Corp., Oriskany Falls, N. Y., is again operating on full time day schedules with the regular working force.

Reduction in Full Fashioned a Feature

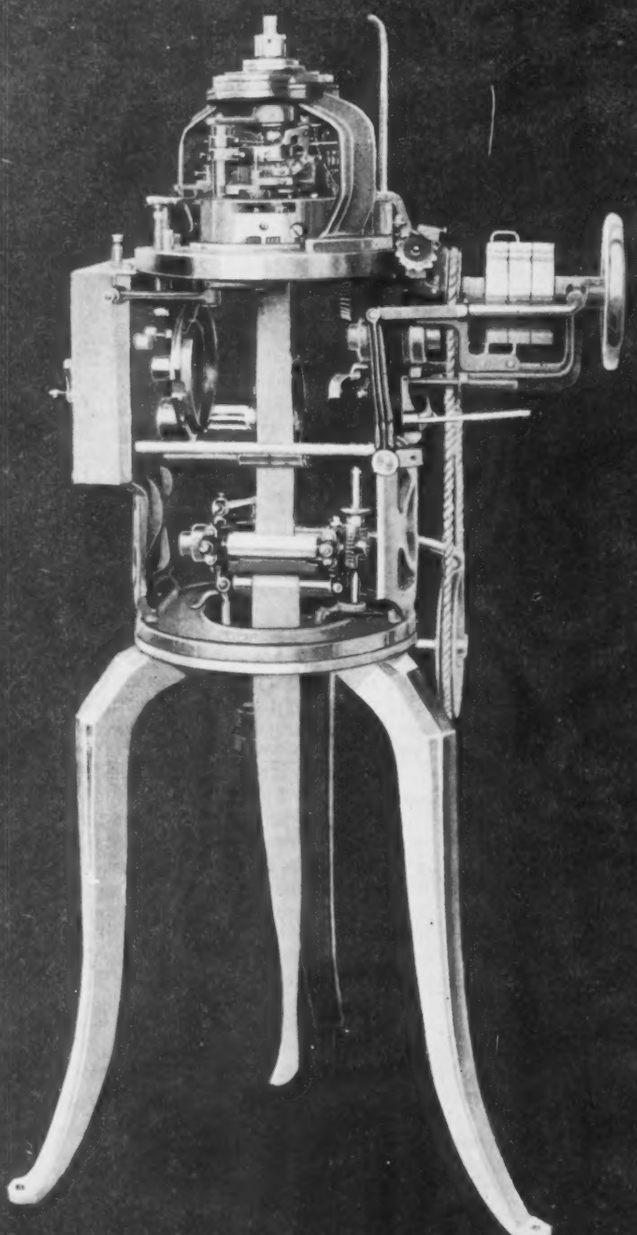
Determination to Discourage Competition Thought to be Basis for This Action

The principal feature of the hosiery market is the unexpected reduction by the largest manufacturer of full-fashioned hosiery. The naming of prices by the Berkshire Knitting Mills for fall at a reduction of from 25c to 40c per dozen below old prices came as a distinct shock to the trade in view of the upward tendency of the raw material market. A good many theories have been advanced as the reason for this move, which it is felt will be followed by other lines. The most common explanation is that while apparently the production of this company has been sold ahead for a considerable period it has been on the basis of allotment and buyers have not taken thir allotments. By those in position to know it is declared this is absolutely contrary to conditions. It is also felt that this leader in the industry is recognizing the influence which a comparatively small percentage of the hosiery industry may have upon prices in general, and that with growth of full-fashioned plants manufacturers may name figures which will be decidedly competitive; consequently it is believed these leaders are determined to take time by the forelock naming such prices as will assure not only the distribution of their present output, but consumption of even larger production when this is available. There is no doubt that the Berkshire has sold a large amount of merchandise ahead but that on lines which all the trade are making, increased competition is expected and planned for.

Details of Reduction

It is significant that in the Berkshire reduction the greatest difference is on a seven thread all-silk hose on which the new price is $11.85 as against $12.25. The next greatest reduction is on 5-thread silk to welt, where the new price shows a reduction of 35c per dozen. Other lines, with the exception of a 7-thread silk to welt, where also a 35c decline is indicated, show a difference of only 25c. A feature of the new lines is the black or colored heel type and on these prices ranging from $11.50 to $16.50 are the same. It is understood the company cannot keep pace with demand for resist heels. Two new lines are included, one a 7-thread silk to welt with a black heel at $11.50 and another 10-thread silk to welt—outsize—at $12.75. Reports of new lines in contrasting heels are current but so far no information as to the details of this new merchandise are available.

Selling agents continue to report



Start *right*
with
WILDMAN
Machinery

WILDMAN
THE WORLD'S STANDARD

WILDMAN MANUFACTURING COMPANY
Norristown, Pa.

We have issued a new edition of the complete and informative book, "The Science of Knitting." Price $2.00.

WILDMAN
CIRCULAR RIBBER

Knit Goods—Continued

more or less general complaint by the buyer on the matter of delivery. This is especially true on infant's socks. A selling agent for a line of southern goods told the story this week of a buyer who placed his spring order on March 17 and is now complaining bitterly because he has not received the order in full. The agent in question declared it was not very politic to remind this buyer that it was his own fault and that he should have bought his goods months earlier. He admitted that the time to talk in this way to the buyer was before he placed his order in an endeavor to get him to anticipate his orders, but nothing is to be gained by reproaching the buyer with lack of foresight. Manufacturers and selling agents wonder whether this experience on the matter of delivery is going to cause a changed attitude, especially on infants' socks, for fall. While it might appear that inability to get deliveries would teach the buyer a lesson, it is not expected that it will and that he will delay just as long for fall as he did for spring.

Are Fancies on Down Grade?

While many selling agents have for a long time expressed the belief that the high point in men's fancy half hose has been reached, the majority are cautious about prophesying their practical elimination. There have been forecasts as to the passage of the fancy, but these predictions have been made so long, and have not been fulfilled, that it is regarded as unwise to predict along these lines. Nevertheless, prominent authorities declare there is less interest shown by the buyer in fancies. One reason for this is thought to be the difficulty of getting out something radically new. Combinations of colors and of patterns have been worked almost to the limit say those who have watched the progress of the fancy half hose. It is recognized that the buyer is interested only in novelties and is beginning to be surfeited by the lines which are on the market in which he cannot see anything of a radical departure. It is possible that something of a distinctive nature may be brought out that will continue the call for this class of goods, but at the moment this does not seem likely.

Russell Mfg. Co. Withdraws from Yarn Business

Russell Mfg. Co., Inc., Alexander City, Ala., are installing looms to take the production of yarn that was formerly sold to the trade. They expect to close the Philadelphia cotton yarn sales offices in the Lafayette Bldg., about June 1. Wm. A. P. MacKnight, selling agent for their yarns during the last 10 years, announces his own plans for the future are not yet ready to be disclosed.

The Farish Co., 100 Worth St., New York city, has been appointed selling agents for the new products of the Russell Mfg. Co., Inc., which will be underwear cloths, plain and fancy pajama checks, dobbies and specialties. The Russell Mfg. Co., Inc., according to present plans will install 1,000 looms for the manufacture of these new lines, expecting to retire from the cotton yarn business on June 1.

Silk Group Attacks Trade Abuses

A recent inquiry conducted by the Sales Managers Group of the Silk Association of America, Inc., indicates that trade abuses in the silk industry have aroused the attention of many silk manufacturers.

As an initial step toward bringing about improved conditions, the Group has established a bureau for the elimination of certain trade evils, to be known as the Research Bureau of the Sales Managers Group of the Broad Silk Division. Cooperative action will be possible through the action of this bureau, which is functioning from the association offices.

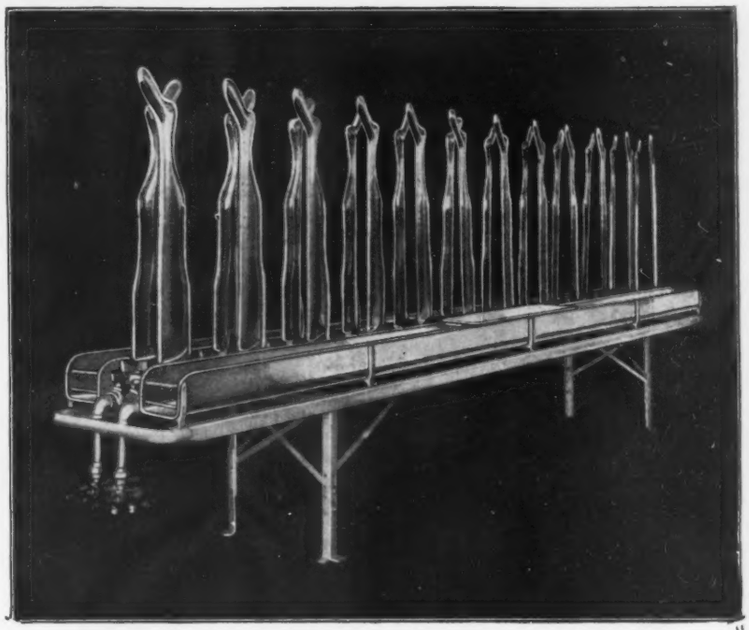
How far reaching are the plans of the bureau may be shown by the variety and scope of the questions in which it is interested. They are such questions as: production and consumption problems; unjustified return of goods; repudiation of contract; rulings on depreciation of merchandise, such as shrinkage of georgette and other silks; responsibility of seller in cases where goods dyed several shades different from that ordered, are refused by buyer; return of merchandise for alleged imperfections; unjust or excessive claims; claims made after goods have been cut or made into garments; return of goods after they have been on sale.

Marine Corps Blanket Bids Opened

PHILADELPHIA.—Clarence Whitman & Sons, Inc., were the lowest bidders on 15,000 woolen blankets to be supplied to the Quartermaster's Department of the U. S. Marine Corps, on which bids were opened Apr. 29. The bid of this concern was $3.95, each, terms 3%, 10 days, 2 5/6% in 20 days, or 2 2/3% in 30 days, complete delivery in 135 days.

Other bids were: Chatham Mfg. Co., Winston-Salem, N. C., $4.24 net, with complete delivery in 150 days; Bedford Woolen Co., Inc., Bedford, Va., $4.72 net, delivery of 5,000 in July and 5,000 monthly thereafter; H. D. Lehds Co., N. Y., $4.724, terms 1% 10 days, with delivery of 5,000 in 90 days and 5,000 monthly thereafter; Kent Mfg. Co., Clifton Heights, Pa., $5.43 net, with delivery of 1,000 in July, 5,000 in August, 5,000 in September and the remainder in October.

Springfield Woolen Mills, Co., Springfield, Tenn., $4.105 net; delivery to begin in 30 days at the rate of $1,000 or more weekly; Batavia Mills, Inc., N. Y., $4.218 net, delivery to begin in 45 days and be completed in 120 days; American Woolen Co., N. Y., $4.87 cents net, no delivery stated, as bid was in mail.



PARAMOUNT FORMS

The Most Widely Used Method of Hosiery Finishing in the World

1. The only Form with which the Paramount Patented Holder can be used. This Holder produces even lengths and saves fabric.
2. The only Form with sharp edges for producing pronounced and perfect creases assuring flat lying fabric.
3. The only Form with special oval construction and patented thick toe to eliminate ears and puckers in the stocking.
4. The only Form with Patented Toe-Grooves to insure rapid boarding and perfect alignment of the toe gores.
5. The only Form made in one piece and of aluminum, insuring long life and permitting reasonable exchanges. Aluminum can be recast when change of shape is necessary. This metal will not stain or corrode and it takes a smooth high polish so essential in finishing Chiffon hosiery.
6. The only Form with three types of Grooves for perfect alignment of seams for boarding full-fashioned and mock-seamed goods.
7. The only Form mounted on All-Metal Table with Patented Removable Aluminum Troughs, facilitating changing of forms and cleanliness. Troughs are made with rounded corners eliminating possibilities of pulling threads.
8. The only Form equipped with Angle-Base Attachment enabling operative to see both sides of the stocking without moving the form. It facilitates the stripping operation and produces improved finish of the tops.

Paramount Equipment furnished on sale or rental basis.

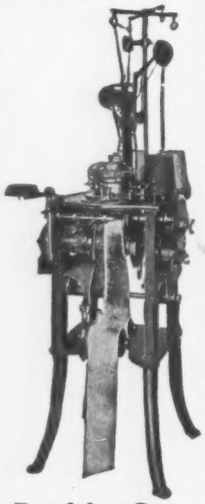
See also CONSOLIDATED TEXTILE CATALOG

PARAMOUNT TEXTILE MACHINERY CO.

Chicago, Illinois

NEEDLES and MACHINES
OF
RECOGNIZED
QUALITY and WORTH

Acme A



Revolving Cams

are the

ACME PRODUCTS

made for

SERVICE

in the

KNITTING ROOM

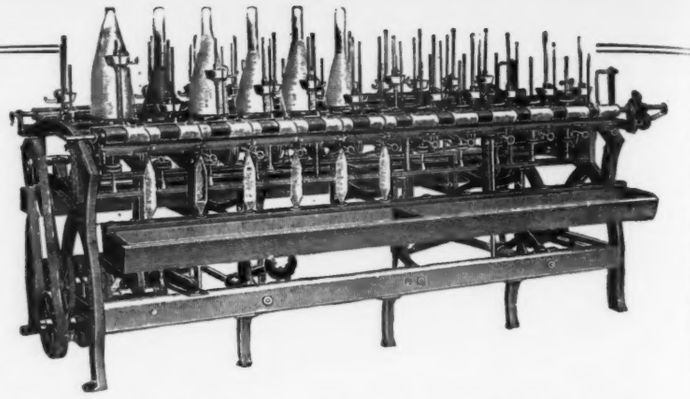
Ask those who use them

See also CONSOLIDATED TEXTILE CATALOG

Acme D

Revolving Needles

Acme Knitting Machine and Needle Co. Franklin, N. H.



PAYNE WINDERS

Wind from Cop, Skein or Bobbin

Over 1,900 in use by Hosiery Manufacturers

IMPROVED UPRIGHT SPOOLERS

To Spool from Cop, Skein or Bobbin; Doubling Spoolers for Doubling two, three or more ends into one; Upright Quillers, Quill from Cop, Skein or Bobbin. Ring Dresser, Spooler and Reel Spindles, Cop Skewers, Spooler Guides, Bolsters and Steps Made and Repaired at Short Notice.

GEO. W. PAYNE CO., Office, 102 Broad St., PAWTUCKET, R. I

(Est. 1865, Inc. 1903)

CHARLES W. PAYNE, Pres. CLINTON F. PAYNE, Sec'y and Treas.

Established 1870 Incorporated 1890

Get Repeat Orders by Using

Crane Spring and Latch Needle Knitting Machinery

SOME CRANE FEATURES

Patent removable hardened Wing Burr Wheels.

Patent Thread Stop Motion can be fitted to 20 in. and 32 in. frames and are specially adapted for making fine Jersey Cloth and Stockinet.

Our flat machine is adapted for knitting collarettes.

SPRING NEEDLE UNDERWEAR MACHINE WITH AUTOMATIC TAKE-UP

This machine is made in sizes from 13" to 26" in diameter of any desired gauge, the number of feeds depending on the size of cylinders. Also built in sizes from 2½" to 32" in diameter for the production of a great variety of fabrics.

Aside from the feeds for plain fabrics, the stockinet, elderdown and astrachan feeds are superior to any on the market.

IMPROVED AUTOMATIC COLORED PLAIN STRIPER

Made in sizes from 7⅝" to 20⅝" inclusive, of any desired gauge; these measurements being back to back of cylinder needles.

The fabrics from this machine are used for bathing suits, theatricals and athletic goods.

These machines are second to none on the market.

The Crawford stop-motion is applied when requested.

"It Pays to Use Good Machines and the Best Are None Too Good."—Our Motto

LET US SEND YOU FURTHER FACTS See also CONSOLIDATED TEXTILE CATALOG

CRANE MANUFACTURING CO., Lakeport, N. H.

CHARLES COOPER CO.
Machine and Needle Works
BENNINGTON, VERMONT

G. H. ROGERS, Representative, 877 Warren St., Albany, N. Y.

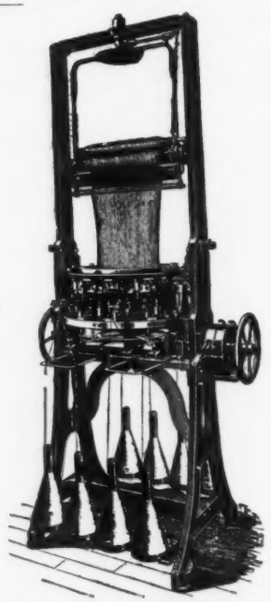
Spring and Latch Needle KNITTING MACHINERY

STANDARD FOR

Plain Ribbed, Circular and Flat Underwear
Shirt Cuffs
Drawer Bottoms

Rib Cuff Cutting Machines
Burr Wheels and Burr Blades
Balmoral Collarette Machines
Automatic Rib Cutting and Folding Machines

SPRING AND LATCH NEEDLES



Spring Needle Rib Body Machine

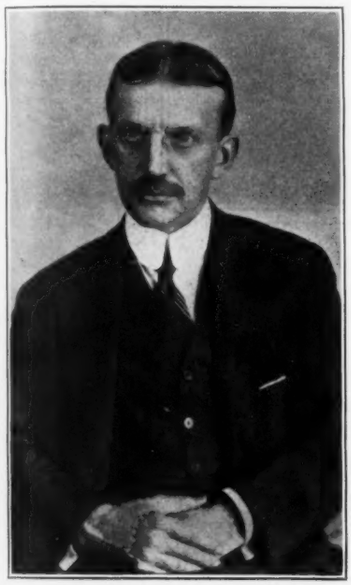
SOLE AGENTS FOR CHINA

ELBROOK, INC., 51 Kiangse Road, Shanghai, China

Obituary

William F. Read, Jr.

William Franklin Read, Jr., vice-president of Wm. F. Read & Sons Co., Philadelphia, one of the most prominent textile manufacturers in this vicinity, died May 1, in the Chestnut Hill Hospital from injuries received in a motor accident the previous Thursday. After the accident, which was a four car collision on the East River drive in Fairmount Park, Mr. Read was taken to the Memorial Hospital in Roxborough. It was felt at first that his injuries were not serious and he had advised the mill that he planned to be at his office again last Monday. Later complications developed and he was moved to the Chestnut Hill Hospital where death occurred. Mr. Read was in his 57th year, having been born in Philadelphia, July 31, 1871, the son of William F. and Victoria Read. He was graduated from the Central High School and immediately entered his father's dress goods manufacturing business as a partner. The mill is located at 12th and Jackson streets, one of the largest concerns in the city. He was a director of the Colonial Trust Co., and was a member of the Union League, Bachelors' Barge Club and the Philadelphia Country Club. Surviving him are his widow and three daughters. Funeral services were held Tuesday, interment being made in Laurel Hill Cemetery.



William F. Read, Jr.

Paul W. Berthold

Paul W. Berthold, who was overseer of the wool department of the Webster (Mass.) Mills of the American Woolen Co. until illness prevented, died at the Rutland (Mass.) Sanitorium on April 27, aged 38 years. He was formerly clerk for S. Slater & Sons, Inc., and remained with the mills after they were purchased by the American Woolen Co.

Thomas J. Armstrong

Thomas J. Armstrong, president and general manager of the Noon Bag Co., Portland, Ore., died at his home in that city April 22, at the age of 60. He was born in Nova Scotia, moving to Boston when a child, and afterwards going west to San Francisco. In that city he was connected with the Neville Bag Co. In 1886 be became connected with the W. C. Noon Co. in Portland, where he has remained ever since, taking a prominent part in the growth of the city.

Lee M. Jordan

Lee M. Jordan, president of Gate City Cotton Mills, vice-president of Piedmont Mills and Cartersville Mills, and one of the leading cotton executives in the State, died at his home in Atlanta, Ga., May 3. Mr. Jordan, who was 52 years old, came to Atlanta in 1896 from Hawkinsville, Ga., making a connection with the law firm of Hoke Smith and H. C. Peeples and Jordan. After serving as counsel for the Gate City Cotton Mills for a number of years, upon the death of its President Samuel Carter, Mr. Jordan was elected president of the concern in 1920, and soon became one of the leading textile executives in his section. He was one of the founders of the Cotton Manufacturers Association of Georgia, serving as its president in 1925 and being for many years a director and its general counsel. He was a leading figure in the formation of the Atlanta Commercial Exchange and largely responsible for the construction of the present Commercial Exchange Building. He was a past president of the local Rotary Club, a member of the Atlanta Chamber of Commerce, Capital City Club, Druid Hills Golf Club, Atlanta Athletic Club and North Avenue Presbyterian Church of which he was a member of the board of deacons and treasurer at the time of his death. Mr. Jordan had retired from active work several months ago because of ill health. The funeral was held from his residence Wednesday and interment was in West View Cemetery, directors of the Cotton Manufacturers Association serving as pall bearers and honorary escorts.

Richard J. Salter

Richard J. Salter, a pioneer in the wool trade of the United States, died at his summer residence, Marblehead Neck, Mass., Sunday, May 1, after an illness of more than a year. He was in his eightieth year. Mr. Salter formed the wool firm of Salter Bros. thirty-four years ago, with offices in Boston, New York, and St. Louis. He was born in Birkenhead, Chester County, Eng. He came to the United States and entered the wool trade when eighteen years old at Worcester. Some seventeen or eighteen years later he formed the firm of Salter Bros., with his brothers, James and Charles. He is survived by two daughters, Mrs. Harry B. Thayer of Marblehead and Mrs. Ezra Bushnell of Waban, Mass.

William Edward Elsberry

William Edward Elsberry, aged 74, textile manufacturer of Montgomery, Ala., died last week at the home of his daughter, in Coral Gables, Florida. Mr. Elsberry was injured in an automobile accident last October. He was secretary of the Tallahassee Falls Mfg. Co., of Montgomery, Ala., and had been engaged in textile manufacturing for more than 30 years.

Fenner C. Brownell

Fenner C. Brownell, treasurer of the Shove Mills, Fall River, Mass., in 1920, died in that city on May 1. Mr. Brownell was connected with the Shove Mills for many years, having begun in the capacity of superintendent and bookkeeper.

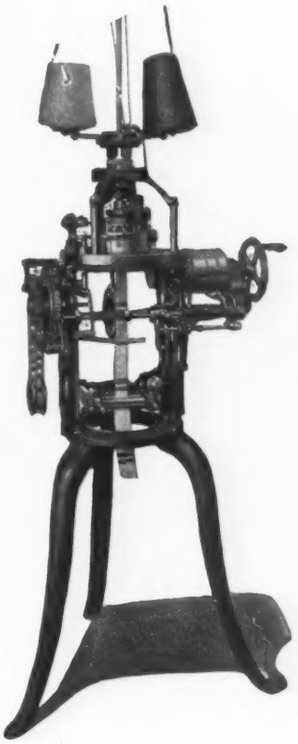
Better Than You Expected

YOU demand—and expect—certain standards of performance from the machines in your factory.

Brinton machines meet these expectations—and more.

Name any standard—speed, economy, quality—Brintons meet them all. Thirty years of experience in building finer machines are your guarantee of satisfaction.

We will be glad to furnish information of our complete line.



H. BRINTON COMPANY

3700 Kensington Avenue Philadelphia

CIRCULAR BRINTON KNITTING MACHINES

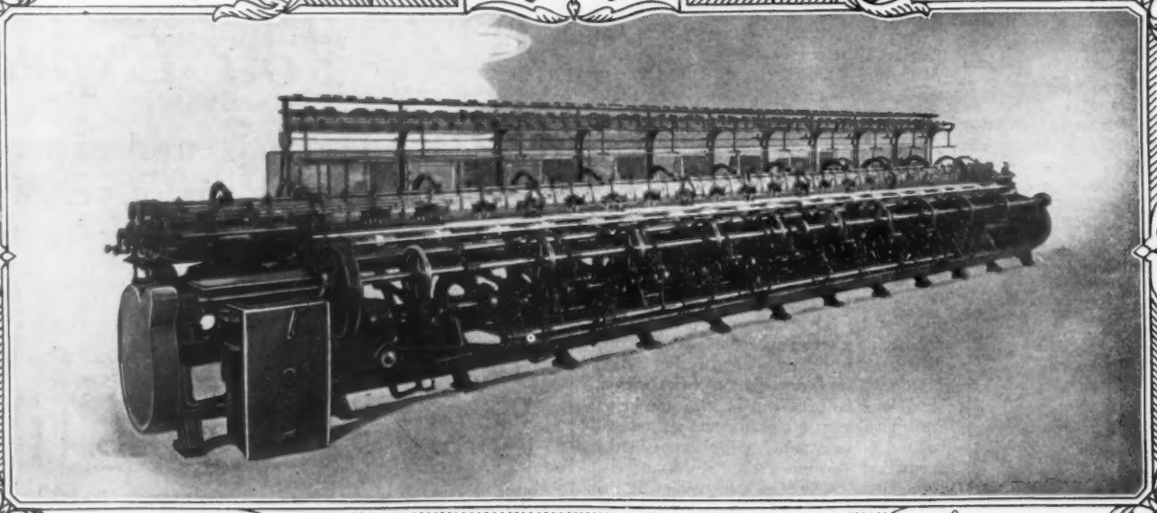
FOREIGN AGENTS

Great Britain and the Continent: Wildt & Co., Ltd., Leicester, Eng.

South America: Santiago Scotto, Moreno 1756. Casilla Correo 662, Buenos Aires, Argentine Republic.

Australia: J. H. Butter & Co., Sydney, Melbourne.

China and Japan: Elbrook, Inc., 51 Kiangse Road, Shanghai, China



Speaking of Dividends

When you consider the amount of capital necessary to enter the hosiery business, isn't it the part of wisdom to invest in equipment that has proven itself thoroughly dependable in America's largest and most profitable mills?

Reading Full Fashioned Knitting Machines lay just claim to that distinction by their acknowledged ability to produce the most "firsts" per section over any given period of time. And it's the firsts per year that determines the value of any Full Fashioned Knitting Machine.

TEXTILE MACHINE WORKS, Reading, Pa.

As far as well-dressed women are concerned, there *is* no other stocking but Full-Fashioned.

See also CONSOLIDATED TEXTILE CATALOG

The READING

FULL FASHIONED KNITTING MACHINE

FABRICS

Better Spirit in Wool Goods

Men's Wear Fall Orders Have Increased—Available Capacity Is on Decrease

BETTER spirit pervades the wool goods markets as the result of a slight gain in orders booked for delivery ahead. The gains have been the accumulation of scattered business which has apeared during the last few weeks. It is partly the result of clothiers' solicitation of the retail trade and partly due to the final digestion by some of them of the situation as a whole.

Though the retail trade has not been operating heavily with clothiers for the new fall season, yet orders have been sufficient to show clothiers which way the wind blows. The market situation has been before them now since February, and not so much is required to stir them to act on the data which they have been mulling over for about three months. Retailers have not come out of their shell to any marked degree and their operations will probably be as close to their distribution season as possible. Specific style information is not any more certain than it was several weeks ago, but variety is the keynote and where that holds true it seems that one canot make a mistake by ordering a little of each of a wide range of styles.

Another potent element which clothiers may have taken into consideration in increasing their operations, is the number of mills closing down for lack of orders. A number of such mills have been dragging along in the hope that initial or duplicate business would prove sufficient to let them speed up their schedules a bit, but as these mills come to the end of the orders in hand without additional business, the decision to shut down temporarily must be made. And some of the mills which shut down temporarily, end up by making it permanent as they realize that their handicaps, financial and otherwise, make starting up a losing fight.

As this process continues, approach is made to balancing productive capacity of the industry with actual demand. It is the law of the survival of the fittest working itself out. An appreciable number of mils have withdrawn from the business during the last few months, and it is apparent that more are going to join them. Whether clothiers realize that their method of operating is forcing many of their sources of supply out of business with eventual strengthening of the market against them, is only a matter for conjecture. Certainly the fewer the looms that are moving, the harder will last minute orders be to fill and the more limited will be the yardage available at any one time to the garment trade.

The market has been interested in the withdrawal of all Weybosset and Globe Mills suitings and overcoatings by the American Woolen Co. On account of the sold-up condition of these mills, it is said that no more initial orders will be accepted on their goods, but that a limited amount of duplicate business may be accepted later for August and September deliveries only. A few other mills in the industry are also in this sold-up state. With only a few exceptions the woolen mills of distinction have profited most by the trade so far, and the general field of worsteds still needs developing.

More talk of the necessity for price advances on goods is heard and it is problematic whether mills will wait till the new spring season opens during the summer or act before then.

* * *

Women's Wear: Garment makers are gradually expanding their interest in the fabric market. Many of the new things shown for fall have proved a healthy stimulus and considerable sampling has been in progress. The situation is expected to open up to a greater extent in June and July.

* * *

Wool Prices: Despite the weakness in some sorts of wool during recent weeks, the fact that large lots are being reexported at better than domestic prices appears to show that the domestic market is subnormal and therefore near, if not actually at, bottom.

* * *

Overcoatings: Business remains irregular with a number of makers still much dissatisfied. The situation does not permit generalization for while some woolen mills are closing down, in other quarters selling agents are seeking additional woolen productive capacity.

* * *

Children's Coatings: Fall lines in children's coats are now about ready for presentation to buyers, according to the United Infants', Children's and Junior Wear League of America. There is an extensive display of chinchilla coatings and other plain fabrics. Both bright and pastel colors are shown in wide variety. One of the most important features of these early showings is the matching of coat with hat, the hat being made of the same woolen material as the garment it is made to be worn with.

The Sanford (Me.) Mills plush department has started night work with 175 looms, with that number of employes, on work that is expected to continue all summer.

Marvel Cottons Not More Bullish

Sellers Seem to Prefer Stabilization to Chance for Increase in Immediate Profits

DESPITE the fact that business throughout the cotton goods market is good, many merchants are watching events closely for possible truths which are not evident upon the surface. They are also trying to anticipate the outcomes of these events in their relation to the market. The two facts which are being given most thought appear to be the continuance of old prices upon prints, ginghams and denims into the fall period, and the floods in the lower Mississippi.

As to the continuation of former prices at a time when it appeared that a small advance might have been established, there is some difference of opinion. Certain sellers point out the advantages of a stable market, the discouragement of speculation, etc., and argue that the manufacturers in question were willing to forego larger profits for the benefits of stabilization. Another thought on the subject is supplied by those merchants who believe that so many of the smaller mills would have remained at the current basis that the larger factors could not have afforded to make the advance alone. Other merchants amplify the first thought by indicating that a runaway market in cotton at present would be injurious because of the undoubted slump when reaction came and they point out that rising goods prices would give professional cotton traders a strong bullish argument. Still other comments are to the effect that it is a mistake not to take profits when they are to be had, and that it is the manufacturer's responsibility to his stockholders to get the highest price from his customers. The latter type of merchants argue that it was a mistake not to have advanced prices on the above mentioned goods when priced for a new period last week.

On the flood situation, merchants withhold judgment, believing that staple cotton chiefly will be directly affected. There are certain amounts of merchandise losses and losses to farmers, which are difficult to estimate. Most Worth street factors do not believe that the merchandise losses will be enormous for the reason that the towns inundated have been for the most part small hamlets. The flood crest had not passed the cities on the lower part of the river at the present writing, so that the whole story of the flood had not yet been told, and this judgment on the part of Worth street may be premature. The losses which the farmer will sustain will be large, but the season keeps them at a minimum under the conditions. It is a time when the farmer is likely to have more of his property in the bank than at any other time of the year.

Offset against flood losses is the fact that there must be considerable replacement after the flood subsides. That this can be done on credit is conceded. The relation of the flood to the cotton crop already has been felt and with prices a full cent higher at the beginning of the week than what they were a month ago, it is a wonder that bullish effects are not more prevalent in the goods market.

* * *

Print Cloths: Reports early in the week were to the effect that 64 x 60s and 60 x 48s were the most active numbers. The finer constructions have been more closely held, the 72 x 76s and 80 squares being examples of this. At spot early in the week it was difficult to locate 64 x 60s at 6⅞c, for most holders were asking 7c. The lower figure was possible for later deliveries. Even there, however, there was a rising tendency. It is said on good authority that considerable business has been put through for delivery to the close of the year. It is apparent, therefore, that some buyers on the primary market have more confidence in the situation than is shown by the average jobber or retailer.

* * *

Denims: As noted in these columns last week the 14½c basis on the 2.20s denim was continued into the third quarter of the year by certain large producers. The Cone Export & Commission Co. is reported to have sold up its capacity for that quarter at that figure within a few days and to have withdrawn the lines.

* * *

Ginghams: The situation has been clarified by the repetition of past prices on goods for the coming fall

Cotton Goods Quotations

	May 4	Apr. 27	May 5, 1926
Spot cotton, N. Y.....	15.95¢	15.30¢	18.90¢
Print Cloths			
27- in., 64x60, 7.60..	5¢	4⅞-5¢	5⅛¢
38½-in., 64x60, 5.35..	6⅞-7⅛¢	6⅞-7⅛¢	7⅛-7⅜¢
39- in., 68x72, 4.75..	7¾-8¼¢	7¾-8⅛¢	8⅜-8⅝¢
39- in., 72x76, 4.25..	8⅞ 9¢	8⅞-9¢	9⅛¢
39- in., 80x80, 4.00..	9⅞-10¢	9¾-10¢	11¢
Brown Sheetings			
36- in., 56x60, 4.00..	7¾-8¢	7⅞-8¢	9¼-9⅛¢
36- in., 48x48, 3.00..	9¼¢	9⅛-9¼¢	11¼-11⅜¢
37- in., 48x48, 4.00..	7⅜-7½¢	7¾¢	8½¢
Pajama Checks			
36½-in., 72x80, 4.70..	7⅝-7¾¢	7⅝-7¾¢	9⅛-9⅝¢
36½-in., 64x60, 5.75..	6⅜-6½¢	6⅜-6½¢	7½-7⅝¢
Miscellaneous			
Drills, 37-in., 3 yd....	10¢	10¢	11⅝-11¾¢
Denims, 2.20s.....	14½¢	14½¢	*15½¢
Tickings, 8 oz.....	18-19½¢	18-19½¢	19½¢
Standard prints.....	8¢	8¢	9½¢
Eastern staple ginghams, 27-in.....	9¢	9¢	9¢

*Neminal

BARBER DRIVING TAPES

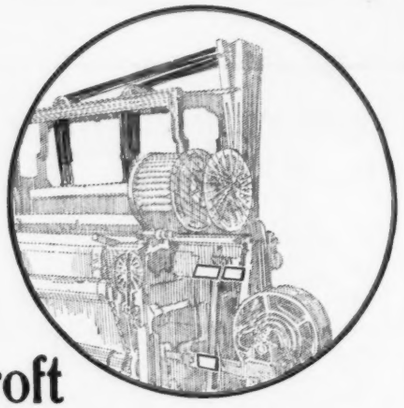
You Can't Beat Them!

LET Barber Spinning Tapes drive your spindles. You can look to them for longer working service — and get it. You can't buy stronger or more satisfactory tapes than these. That's a mighty strong statement — but users confirm it.

As the first manufacturer of driving tapes, the Barber Mfg. Co. has always maintained its leadership through the unvarying quality of its product.

We supply tapes for all frames including cotton, worsted, jute and silk. *Write us.*

BARBER MFG. CO.
199 Perkins St. Lowell, Mass.



Bancroft Round Dobby Straps

YOU will be surprised at the uniformly good results obtained thru using our Round Dobby Straps, and at the small amount of breakage.

A test order will prove this.

BANCROFT BELTING CO.
145 High Street, Boston, Mass.
Leather Belting and Textile Strap Manufacturers

DIAMOND P MEANS QUALITY AND SERVICE

"A good wound cone is an advertisement in itself."

Do you know that "ordinary" cones are costing you thousands of dollars yearly?

Insist on
PAIRPOINT Quality and PAIRPOINT Service

Cone and tube makers for over 30 years
Making one quality only—The Best

THE PAIRPOINT CORPORATION

See Also CONSOLIDATED TEXTILE CATALOG

New Bedford, Mass.

Frederick R. Fish, *Pres. & Gen. Mgr.* Thomas A. Tripp, *Vice-President* William A. Clarke, *Treasurer*

NOUVELLE SOCIÉTÉ DE CONSTRUCTION

Formerly **N. SCHLUMBERGER & Cie**

GUEBWILLER, FRANCE
Established in 1808

Specialists in the manufacture of

COMBING, DRAWING & SPINNING MACHINES

for Cotton, Worsted and Silk Waste

FRENCH SYSTEM

JULES SCHWEIGHOFER
356 Winter St., Woonsocket, R. I.
GENERAL AGENT FOR U. S. A. AND CANADA

Fabrics—Continued

season. Buyers approve of this action and the new collections of styles present unusual opportunities for them. In the recent past the cheaper sorts of ginghams have been the best sellers. However, as good print seasons are often followed by good gingham seasons there is good chance that next year may see a revival of gingham interest on a larger scale.

Demand Holds to Sheers and Prints

Prices Generally Show No Such Firmness as Is Noted in the Raw Material Market

BUSINESS in the broadsilk market held to about the same pace as has been noted in recent weeks. A trend to firmness in prices for many qualities has not been followed up, but this much can be said that quotations on finished silks are not so weak as they were a month ago. It is even doubtful whether a buyer could find a manufacturer bearish on the market, and whether some of the close quotations on large quantities of georgettes and satins heard in March could be duplicated today.

The spring season is ending in an easy, tapering off fashion, and it now appears likely that the usual splurge on fall openings will not be given so much prominence this year. As a matter of fact it seems that the two seasons are gradually merging into one another. Under present buying conditions no useful purpose is served by a riot of price slashing at the end of one at the same time that forward business is being booked one the coming one.

* * *

Crepe-de-chine: Business reported as quieter with the greatest interest being shown in the pure dye or washable numbers. Better grade goods account for the bulk of the buying. The cheaper goods made out of Canton raws understood to be in a difficult price position. Cutting up trade users are unwilling to pay the advances made necessary by the rise in raw silk and manufacturers for their part are unwilling to book business so far below replacement costs.

* * *

Georgette: Large business being done both in finished goods and in the gray. Orders now being placed by jobbers indicate their faith in the continuance of interest in sheer weaves.

* * *

Flat Crepes: Price situation fails to benefit by advance in raw market. Mills close out stocks at close quotations.

* * *

Pongees and Shantungs: Very large demand for over the counter business. Some new qualities made to sell below $1.00 a yard to the consumer find good interest on the part of store buyers.

* * *

Prints: Mills beginning to complain that buyers will not pay prices for new and desirable goods. Stocks of prints believed light around market.

* * *

Silk Situation at a Glance: PRODUCTION: Declining slightly.
DEMAND: Fair.
STOCKS: Smaller.
RAW SILK: Prices steady; stocks smaller.
SENTIMENT: Situation complicated by strength in raw silk.

Further Burlap Weakness

Heavies on Spot Decline to 8.85c on Arrivals and Calcutta Cables

The burlap market was weaker toward the close of last week and early this week. Cables from the primary market in Calcutta indicated recessions and holders in New York were disposed to follow the trend downward. The prospective arrival of five vessels carrying burlap before the middle of the month has been an additional weakening factor to the formerly strong spot situation.

The spot price on heavies (10½ oz. 40s) early in the week was 8.85c and nearby arrivals were at the same figure. May shipments from Calcutta were available at 8.65c. The situation on lights was firmer but these also have been slightly reduced. For example standard lights (8 oz. 40s) were quoted at 6.75c for spot, nearby and May shipment.

The market has been quiet. Importers state that most of the arriving burlap is already sold but buyers are sitting tight and appear convinced that the decline is not yet over.

Changes in American Woolen Blanket Dept.

Harry Ommerle, for many years head of the blanket department of the American Woolen Co., has resigned.

The American Woolen Co. has decided to abandon the production of bed blankets and confine itself exclusively in the blanket field to the manufacture of camp blankets. Mr. Ommerle has not yet completed his plans for the future but it is probable he will engage in business on his own account.

Continues Fashion Service

Miss Muriel J. O'Gorman, formerly assistant to Mrs. Helene Volka, who recently resigned as director of the Fashion Service Bureau of the Botany Worsted Mills, is temporarily in charge of that department which will continue to issue the "Bulletin" and "Trend" popularized under Mrs. Volka's direction.

Joins American Textile Co.

Ralph B. Gatcomb, has become associated with the American Textile Woolen Co., New York. He was formerly associated with Deering, Milliken & Co.

Reducing Overhead

IN THESE days of steady pressure on the margin of profit, reducing overhead is a business problem that all wise executives are attempting to solve.

Permitting us to act as your factor enables you to concentrate on the production and sales end of your business—while we take care of your credits, collections, claims, shipments, and all financial matters — *and reduce your overhead.*

Peierls, Buhler & Co. Inc.
260~266 Fourth Ave., New York
FACTORS
For Silks, Hosiery, Woolens, Underwear Cotton Goods and Kindred Lines

FACTORS!

Our factoring service relieves the manufacturer of many details so that he may devote his time, energy and attention to his own specialty,—the production of goods.

In addition to this, we are in a position to offer him well equipped and efficient selling organizations to market his product.

Our method of financing enables the manufacturer to increase his production and sales without adding to his capital investment.

We shall be pleased to send our representative to furnish you with details.

FLEITMANN & CO., INC.
Factors and Commission Merchants
356 Fourth Ave., New York City
Established 1850.

KEEP YOUR MOTORS AND TEXTILE MACHINERY CLEAN WITH A "MARVEL" BALL BEARING AIR COOLED PORTABLE BLOWER

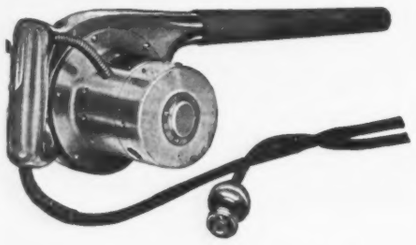
Reduce your FIRE HAZARD

Prolong the life of your machinery

Blower weight, 6½ lbs.
Shipping weight, 18 lbs.
20 feet highest grade electric cable, with armored plug cap.

One hand operated

Note toggle switch in handle
Well balanced
Examine cut of Blower carefully
Wires from motor to handle in metal tubing
Highest grade BALL BEARINGS
Gives 16" water column pressure
Shipped on 10-day trial, anywhere.



—$45.00 Net—

Complete Set of Vacuum Cleaner Attachments $10.00 Additional

ELECTRIC BLOWER CO.
352 Atlantic Avenue BOSTON, (9) MASS.

THE "Big Midget" Portable Blower is finely made throughout, highly efficient in operation, built to give years of service. It is the result of over 60 years of air engineering experience.

Projects *dry* air—free from the condensed moisture ordinarily contained in compressed air. Shoots it out at rate of 250 feet per second.

Light—easy to operate. Handle is *on the top*—not on the end. This avoids strain on the wrist. Switch is on handle—right under the thumb. The "Big Midget" is so admirably balanced that to use it is a delight.

Can be used for suction cleaning. Made in stationary type with supporting foot. Write for circular.

B. F. STURTEVANT COMPANY, Hyde Park, Boston, Mass.
Offices in Principal Cities.
Distributors:—
Graybar Electric Co., Offices in Principal Cities.
Ideal Commutator Dresser Co., Sycamore, Ill.; New York, Chicago, Pittsburgh.

Sturtevant (REG. U.S. PAT. OFF.) *Big Midget Blowers*

Designed Specially for the Textile Industry

CADILLAC Portable Electric BLOWER

Equipped with NORMA Ball Bearings. Requires No Oiling

As originators and largest manufacturers of portable electric blowers we have built types and sizes especially adapted for particular kinds of service. For the Textile Industry we recommend the CADILLAC Type G, which has the power and the durability required for this class of work.

In addition to its use for blowing lint out of cards, slubbers, spinning frames, looms, napping machines, shearing machines, knitting machines, etc., it will pay for itself as electric motor insurance in keeping windings clean and free from lint and carbon and thus prevent "shorts" and "burn outs."

We can supply an attachment adapting it for disinfecting and fumigating purposes. It may also be supplied as a hot air blower for quickly drying samples in dye testing work. It is also instantly convertible for suction cleaning.

There are hundreds of uses for the CADILLAC Blower. Write for descriptive folder, prices, etc.

CLEMENTS MFG. CO., 607 Fulton St., Chicago

One man—*in less time than two*

TURN on the fan. Watch the Allen System unload an extractor or a dye tub. With the attention of one man, it finishes a batch in less time than it takes two men removing the stock by hand. It delivers the stock quickly to the place of the next operation — without sheeting or trucking. Quick, efficient, this pneumatic unloading!

Materials passing through the Allen System lose much of their moisture — thereby advancing (by test) the dryer's production 5 to 15%. The space around the extractor or dye tub is unobstructed; a second batch can be prepared during the unloading.

This system handles saturated silk, cotton and wool stock, acid soaked waste, rags, bagging, clipping and all other textile raw stock. May we send you our illustrated circular? ***Write us.***

E. H. ALLEN COMPANY
22 Dorance Street, Boston, 29, Mass.

ALLEN SYSTEM

FINANCIAL

Better Demand and Higher Prices in South

GASTONIA, N. C., April 30.—The gains and losses for the week in the average price of 25 most active southern textile stocks according to the weekly average of R. S. Dickson & Co. registered a net advance of 28c per share for the week ending today.

Practically all of the common stocks of Belmont mills advanced from $1 to $6 per share during the week, and numerous inquiries from various investment sources were received with several lots changing hands. Acme, Crescent, Perfection, Stowe, Eagle and Linford were particularly in demand at advanced prices, and a few of these issues are selling at higher prices now than before payment of cash dividends of 5% by several of the mills during the last ten days.

Several preferred issues were in demand prior to tax listing time and substantial blocks of the higher grade shares were sold, a few of which advanced slightly in price over the previous week.

The general average in the bid price of 25 common stocks closed for the week at $111.76 as compared with $111.48 a week ago and $110.36 on Jan. 1.

New England Textile Stocks

(Quotations at "Public Sale" are based upon last sales at Boston public auction and Boston Stock Exchange. Bid and Asked prices are latest quotations of leading Boston dealers.)

	Public Sale	Bid	Asked
Am. Wool pfd.	56½	...	...
Am. Mfg. pfd.	82⅝	81	84
Amoskeag, com.	62	...	...
Androscoggin	45	42	45
Arlington	66¼	66	68
Bates	127¼	122	126
Berkshire Cot.	...	124	127
Bigelow-Htfd, com.	85	...	...
Boott	...	102	107
Edwards	41	38	43
Esmond, pfd	100¾	98½	...
Everett	10	10	13
Farr Alpaca	164	152	156
Great Falls	14¾	13	17
Hamilton Woolen	28	...	25
Hill	24½	23	27
Ipswich, pfd.	90	...	88
Ipswich, com.	48	40	45
Lawrence	67⅞	69	72
Ludlow Asso.	186	185	190
Lyman	114¼	112	...
Massachusetts	71	65	70
Merrimack, com.	120½	122	125
Nashua, com.	48⅞	47	50
Nashua, pfd.	94½	93	96
Naumkeag	177¼	173	175
N. E. So. pfd.	4	...	...
Otis Co.	24	20	21
Pacific	39¼	...	...
Pepperell	119½	116	...
Plymouth Cordage	110	112	116
Tremont & Suffolk	23¼	20	23
York	27	25	28

Silk Stocks on N.Y. Exchange

(Week ending May 3)

1927 High	1927 Low	Stock	Sales	High	Low	Last
27¼	19½	Belding Heminway	2,800	21	18¾	19
16½	10½	Century Ribbon	700	14⅞	13	14½
57¼	49	Julius Kayser	4,400	51	49	50
18	11½	H. R. Mallinson	16,400	18	12½	16⅞
14⅜	10⅛	Van Raalte	100	10¼	10¼	10¼

Rayon Stocks on N. Y. Curb

(Week ending May 3)

Stock	Sales	High	Low	Last
Courtaulds, Ltd.	100	30	30	30
Industrial Rayon	1,700	7	6¼	6¼
Sala Viscosa	...	...	...	...
Tubize Art Silk	825	228	220	225

Upward Trend In Cotton Stocks

Cotton's Advance Will Help Profits—Fine Goods Mills Doing Well—Lyman May Pay Extra

BOSTON, May 4.

THE continued advance of raw cotton prices has attracted the attention of many investors, who recognize this as meaning that the danger of inventory losses during the balance of the year is practically eliminated and that mills well covered with raw material already have a substantial profit, unless yarns and cloths have been sold too far ahead at recent abnormally low prices. The improvement in business with fine count cotton cloth mills, and to a certain extent with combed and fine count yarn mills, is now attracting attention and stocks of New Bedford and other New England fine count mills have been bid up 5 points or more. Nashawena, which sold in a small way as low as 65 when the dividend was passed last January, has now recovered to 80 bid with little stock available several points higher. The radical advance in Lyman Mills is based in part upon the improved fine goods situation, but more largely upon the company's large accumulated surplus and the prospect of a substantial extra dividend. Of contrary character, but being merely an exception that proves the rule, is the continued decline in the stock of the Lawton Mills Corp., Plainfield, Conn., which sold at the auctions today at 80, a decline of 45 points. Until last year this company had an unbroken dividend record from its inception, but payment of dividends when unearned cut deeply into its surplus and the latter must now be built up before dividends are resumed.

With the exception of the decline in Lawton and the more moderate declines in National Fabric common, Connecticut first and second preferreds, Plymouth Cordage and American Mfg. com., all of the sales at today's auctions were either at unchanged prices or at more or less substantial advance. Among the most substantial advances were stocks of Ludlow Associates, Lyman Mills, Brookside, Wamsutta, Pepperell, Naumkeag and Bates. All of the textile stocks listed on the local exchange are higher for the week excepting Amoskeag preferred which is off 4 points at 80. Amoskeag common sold within the week at a range of 59½ to 62, closing at the latter figure today for an advance of ½ point for the week. American Woolen common at 19¾ is up ⅝ point, and the preferred at 56½ shows an advance of 1½ points for the week. Pacific at 39⅛ is up 1⅛ points, and Bigelow-Hartford common is fractionally higher for the week. A little interest has been shown in the New England Southern issues, the preferred advancing 1 point to $4 and the common advancing from 75c a share to 99c.

Waypoyset Rights

Common stockholders of the Waypoyset Mfg. Co., cotton goods, Central Falls, R. I., have the right until May 31 to subscribe to the stock of the reorganized company on the basis of $95 for a block consisting of one share of prior preference cumulative convertible stock without par value and one share of common stock without par value of the new company for each two shares of common stock held in the old company of record March 25, 1927. Common stockholders may subscribe for additional stock in the new company at the same price, but the right to reject or accept such additional subscriptions is reserved. Stone & Webster, Inc., 49 Federal St., Boston, Mass., are transfer agents for the stock of the reorganized company.

Nashawena Dividend Resumption

The ultra-conservatism of the action of directors of the Nashawena Mills, fine count cotton, silk and rayon fabrics, New Bedford, Mass., in passing the dividend for the final quarter of 1926 is illustrated by the rapid recovery that has been made by this company's business during the first quarter of the current year, and the resumption of dividend payments on the previous $6 annual basis. Notwithstanding the marked decline in cotton and cloth prices as compared with those of last year, sales are running at a quarterly rate in excess of the $7,250,000 business done in 1926; the company has an ample supply of cotton and other raw materials at prices well below those now current; unfilled orders cover the bulk of the mill's products well through the summer months, and loom operations are now practically at full single-shift rate. For 1926 it will be remembered that the company reported a loss after all charges and depreciation of $16,067. Earnings for the first quarter of the current year, before depreciation, were $161,000 or approximately 50% in excess of the $112,500 required for dividends at $1.50 per share on the outstanding 75,000 shares. Following the passing of the dividend in January Nashawena stock sold in a small way as low as 65, but has sold within the week at 80 ex-dividend with very little stock reported available even at 85.

Dividend for Hamilton Creditors

Charles F. Rowley and Reuben Dunsford, receivers for the Hamilton Mfg. Co., cotton goods, Lowell, Mass., in filing their first report in Suffolk County Superior Court, Boston, Mass., state that they will soon ask the court for authority to pay a dividend of 65% to creditors, which dividend will leave a balance on hand sufficient to meet contingencies that may arise before the payment of a final dividend. The receiver's consolidated balance sheet shows total assets of $1,337,889 and total current liabilities of $1,292,745, leaving a reserve for receiver's fees, expenses, and undetermined claims of $45,144. The report declares that on April 13, coincident with the court's affirmation of decree of sale of the assets to Marden & Murphy, Inc., Arthur R. Sharp, former treasurer of the company, paid to the receivers $100,000 in cash and surrendered two notes of the company payable to his order at the face value of $25,000 each, and that on April 14 the remaining provisions of the decree of sale were completed by the delivery to the receivers of $150,000 by certified check and a temporary bond for $396,368, secured by a mortgage indenture of all the remaining fixed assets of the Hamilton Mfg. Co., under which mortgage the Old Colony Trust Co. is trustee. The report declares that this mortgage runs for one year from April 14 and provides that no sale of any of the assets covered by the mortgage shall be made by the purchasers without approval in writing by the receivers of the sale price, and that in every case the net sale price shall be turned over to the receivers until the full face of the bond with interest has been satisfied.

Would Sue Hamilton Directors

E. Paul Gilman and 137 other stockholders of the Hamilton Mfg. Co., Lowell, Mass., claiming to hold 5,705 shares, have petitioned the Suffolk Superior Court, Boston, Mass., to order the receivers of the company to cause or to permit suit in their names against the former directors and officers of the Hamilton Mfg. Co. for damages claimed to be caused to the corporation by their negligence and breach of duties.

Possible Lyman Stock Dividend

Stockholders of the Lyman Mills, cotton goods, Holyoke, Mass., are in reciept of the following straight tip from directors regarding the value of their stock that they are not likely to ignore and that may presage a substantial stock dividend: "It has been reported to the directors that certain persons have recently been endeavoring to purchase stock of the Lyman Mills. In the opinion of the directors it is unwise for the stockholders to sell their holdings at the present market quotation."

Probably this refers to recent small sales of the stock as low as 110, for within the last few days the stock has been bought at 140 and at today's

Sews *heavy* goods

Designed by the head finisher of a large New England woolen mill, the Dinsmore Improved Gear-type Rotary Machine has met with marked success.

It has proved a practical and effective machine for sewing heavy cotton and woolen goods, cotton ducks, woolen and cotton blankets, artificial leather, etc.

This heavy duty machine is operated by foot power and sews any fabric, thick or thin, wet or dry. It is simply and carefully constructed, the gears being accurately machined. A noteworthy feature is the very heavy base permitting of easy moving from place to place without danger of tipping over. Our line is most extensive. A catalog is yours upon request.

DINSMORE MFG. CO.
Salem, Mass.

See also CONSOLIDATED TEXTILE CATALOG

J. P. STEVENS & CO., Inc.

Commission Merchants

23 Thomas Street 25 Madison Avenue
NEW YORK

L. F. DOMMERICH & CO.

Finance Accounts of Manufacturers and Merchants
Discounts and Guarantee Sales

254 Fourth Avenue
NEW YORK
Established over 85 Years

SPECIALIZING
IN THE SOLVING OF TEXTILE PROBLEMS FOR MANUFACTURER, FINISHER AND DISTRIBUTOR

James W. Cox, Jr. Textile Engineer
320 Broadway, New York

W. Stursberg, Schell & Co.
Commission Merchants
Finance Manufacturers, Selling Direct or Through Agents
Everett Building, 45 East Seventeenth Street, NEW YORK

A. M. LAW & COMPANY
SPARTANBURG, S. C.
SOUTHERN COTTON MILL SHARES
Bought and Sold Outright or on Commission
Correspondence Solicited

Dixon's Patent Reversible and Locking in Back Saddle with New Oiling Device, three Saddles in one, also Dixon's Patent Round Head Stirrup.

Send for samples to
DIXON LUBRICATING SADDLE CO.
Bristol, R. I.

WARREN B. LEWIS
CONSULTING ENGINEER

Textile Plants *Steam and Electric Power Plant*

For over twenty years this organization has been engaged in the work of improving mechanical conditions in industrial plants, through the systematic study of machines and industrial operations.

It is still equipped to render this service with the effectiveness resulting from knowledge and experience.

PROVIDENCE, RHODE ISLAND

Talbot Mills
NORTH BILLERICA, MASS.
FREDERIC S. CLARK, President
Thibets Uniform Cloths

TALBOT MILLS
Trade Mark U.S. Pat. Registered Office
ESTABLISHED 1857

Broadcloths Velours

Selling Agents
PARKER, WILDER & CO.
New York—Boston

BALING PRESS
(HYDRAULIC)

50 to 300 TONS PRESSURE
With or without motor
Size to suit your work
Ask us about them
Dunning & Boschert Press Co., Inc.
388 West Water St.
SYRACUSE, N. Y., U. S. A.

DAY AND ZIMMERMANN, INC.
Engineers
NEW YORK PHILADELPHIA CHICAGO
ENGINEERING - CONSTRUCTION - REPORTS - MANAGEMENT - VALUATIONS

W. E. S. DYER
MILL ENGINEER and ARCHITECT

Design, Specifications and Superintendence for Textile Mills, Industrial Plants and Kindred Structures.

Reorganizations, Valuations and Reports on Mill properties. Power Plants of every description and directions for their economy of operation.

Land Title Building PHILADELPHIA, PA.

Parks-Cramer Company

Engineers & Contractors
Industrial Piping and Air Conditioning
Profit by ParkSpray
"HIGH DUTY CLIMATE"
Fitchburg Boston Charlotte

Federal Engineering Company
Architectural Engineers
Design and Superintendence for Textile Mills and Industrial Plants
318 Stephenson Building MILWAUKEE, WIS.

Telephone Main 3593 Established 1854
CROSBY & GREGORY
HEARD, SMITH & TENNANT
PATENTS
Old South Building, Boston
Patents and Patent Cases - Trade Marks - Copyrights
Special Attention to Textile Invention

WATSON E. COLEMAN
Registered Patent Lawyer
724 Ninth St., N.W., Washington, D. C.
Victor Building
Highest references. Best results.
Promptness assured.
Patents and Patent Law. Trade-marks Registered

Financial—Continued

auctions two shares sold at 151½, or an advance of 35⅜ points from the last previous auction sale. The current dividend rate on Lyman is $6 annually and when the last semi-annual dividend of $3 was declared in February it was stated that it was being paid out of surplus. The company is capitalized at $1,470,000 of $100 par value and at the close of the 1926 fiscal year it showed quick assets of $1,718,006 and quick liabilities of only $30,546. With a net quick of approximately $115 a share a cash dividend of at least $50 a share would appear to be forecast.

N. E. Southern's Reduced Loss

New England Southern Mills shows a net loss, after interest, depreciation, and all other charges for the three months ended March 31, of $12,121, as compared with a loss similarly figured for the first quarter of 1926 of $62,833, while for the first quarter of 1925 the company earned $153,986 after all charges. The most striking feature of the company's comparative income statement is the marked increase in the percentage of manufacturing profit to sales, despite radical decrease in the later. Percentage of manufacturing profit to sales for the first three months of this year was 14.45, and compares with 8.66% for the same period of last year and 12.51% for the first three months of 1925. Decrease in sales was partially due to short time operation of northern plants, the Lowell unit still being run at less than full capacity. Measured in pounds, however, the company's sales are running ahead of last year. The company's southern units are reported to have shown moderate profits after all charges, the net deficit being due to losses of the New England units. The company's income account for the three months ended March 31 compares as follows:

	1927	1926	1925
Sales	$2,218,232	$4,104,663	$4,555,358
Mfg. profit	320,711	355,658	569,745
Current interest	84,278	90,422	62,753
Note interest	136,741	169,176	192,327
Depreciation	111,813	132,857	127,368
Canadian inc. tax	.....	10,000	.....
Misc.	.....	1,664	.....
Less minority stk. int.	.....	14,372	33,311
Net loss	12,121	62,833	*153,986

*Net profit.

Boston Stock Auctions

The following sales of textile shares were made at Wednesday's auctions:

Shrs.	Mill	Par	Price	Change
70	Connecticut, com., B	100	50c	.....
5	Ludlow	...	186	+ 2¾
1	National Fabric, com.	100	22	—13
2	Lyman	100	151½	+35⅜
5	Connecticut, 1st pfd.	100	36	—19¼
5	Brookside	100	85½	+ 4½
15	Wamsutta	100	623/4	+ 4½
10	Connecticut, 2nd pfd.	100	7½	— 7½
50	Smith & Dove, new pfd.	100	23⅞	+ 1⅝
51	Plymouth Cordage	100	111-110	— 4
40	Lawton	100	80	—45
15	Pepperell	100	119½	+ 2⅞
24	Naumkeag	100	177¼	+ 3¼
8	Hill	100	24½	.....
36	Androscoggin*	100	45	.....
25	Butler	100	51⅛	+ ⅞
14	Bates	100	126¾-127¼	+ 3¼
9	Arlington	100	66¼	+ ¾
4	American Mfg., com.	100	87½	— 2½

281 Total.

Dividends Declared

Mill	Pd.	Rate	Stock	To P'ble	stock of
Sycamore	Q	2%	Com.	May 5	Apr. 27
Union Cotton	Q	1½%	Com.	May 2	Apr. 27
Ludlow	Q	$2.50	Com.	June 1	May 4

New Bedford Quotations

(Quotations furnished by Sanford & Kelly)

	Bid	Asked
Acushnet Mills	90	...
Beacon Mfg. com.	125	...
Beacon Mfg., pfd.	94	96
Booth Mfg. Co., com.	95	100
Booth Mfg. Co., pfd.	85	...
Bristol Mfg. Co.	...	122
Butler Mfg. Co.	50	54
City Mfg. Co.	90	94
Dartmouth Mfg. Co., com.	100	...
Dartmouth Mfg. Co., pfd.	80	...
Fairhaven Mill, pfd.	...	7½
Gosnold Mills, com.	8	...
Gosnold Mills, pfd.	28	32
Grinnell Mfg. Co.	70	74
Hathaway Mfg. Co.	104	108
Holmes Mfg. Co., com.	...	55
Holmes Mfg. Co., pfd.	50	53
Kilburn Mill	85	90
Manomet Mills	4¼	5½
Nashawena Mill	78	80
N. B. Cotton Mills, com.	100	...
N. B. Cotton Mills, pfd.	82½	...
Neild Mill	160	165
Nonquitt Spng. Co.	...	32
Pemaquid Mills	...	26
Pierce Mill	352½	...
Potomska Mills	81	...
Quissett Mills Co., com.	90	...
Quissett Mills Co., pfd.	92	...
Sharp Mfg. Co., com.	5	7
Sharp Mfg. Co., pfd.	17½	...
Soule Mill	159	162
Taber Mill	90	93
Wamsutta Mills	61	63
Whitman Mills	48	52

• Ex-dividend.

N. Carolina Textile Stocks

(Taken from list of Southern Mill Stocks quoted by R. S. Dickson & Co., Gastonia, N. C., and Greenville, S. C.)

	Bid	Asked
Acme Spinning Co.	114	117
Am. Yarn & Processing Co.	93	97
Arlington Cotton Mills	82	90
Arrow Mills	80	90
Cabarrus Cotton Mills	142	161
Cabarrus Cotton Mills 7% pfd.	109	...
Cannon Mfg. Co., (par $10)	17	19½
Chadwick-Hoskins Co. (par $25)	13	15
Chadwick-Hoskins Co., 8% pfd.	101	103
China Grove Cotton Mills	111	116
Clara Mfg. Co.	72	...
Climax Spinning Co.	116	121
Clover Mills	...	71
Crescent Spinning Co.	99	104
Dixon Mills	98	101
Durham Hosiery 7% pfd.	42	46
Durham Hosiery "B"	6	10
Eastern Mfg. Co.	...	58
Erwin Cotton Mills Co.	114	120
Erwin Cotton Mills Co., 6% pfd.	100	103
Gibson Mfg. Co.	130	141
Globe Yarn Mills (N. C.)	50	56
Gray Mfg. Co.	...	82
Hanes, P. H. Knitting Co.	8	...
Hanes, P. H. Ktg. Co., 7% pfd.	101	104
Henrietta 7% pfd.	...	80
Imperial Yarn Mills	97	102
Jennings Cotton Mills	223	231
Linford Mills	106	110
Locke Cotton Mills Co.	115	135
Lola Mfg. Co.	...	47
Majestic Mfg. Co.	174	...
Mansfield Mills	118	130
Mooresville Cotton Mills	29	36
Mooresville Cotton Mills, 7% pfd.	...	85
Myers Mill	75	85
National Yarn Mill	100	110
Parkdale Mills	...	77
Perfection Spinning Co.	101	103
Ranlo Mfg. Co.	139	145
Rhyne-Houser Mfg. Co.	75	85
Roanoke Mills, 7½% 1st pfd.	99	101
Roanoke Mills, 8% 2nd pfd.	97	100
Rosemary, 7½% pfd.	98½	...
Rowan Cotton Mills Co.	90	95
Seminole Cotton Mills Co.	79	...
Sterling Spinning Co.	105	112
Stowe Spinning Co.	105	110
Victory Yarn Mills Co.	54	63
Winget Yarn Mills Co.	...	62
Wiscasset Mills Co.	200	...

May Extend Pink Bollworm Quarantine

WASHINGTON, D. C.—A hearing to consider extending the pink bollworm quarantine to Arizona will be held May 16 before the Federal Horticultural Board in Washington. The pest recently was found established in southeastern Arizona in the counties of Cochise, Graham and Greenlee when a survey was being made to determine the range of the western boll weevil, known as the Thurberia weevil.

Textile mills considering direct sales of their production in the finished state to the wholesale, the retail, or the cutting up trades, can eliminate credit risks and keep distributing costs at a minimum through using the services of the Textile Banking Company.

Sales are converted into cash immediately upon shipment of goods.

Correspondence or interviews with reference to selling and factoring textile mill production invited.

TEXTILE BANKING COMPANY
50 Union Square - - - - NEW YORK
FACTORS

Food and Clothing Costs

Fertile soils and long growing seasons contribute to lowering the price of food in Georgia, Alabama, and the Chattanooga District—the territory served by Central of Georgia lines. Keeping the larder stocked costs the employe in Southern textile mills less than it does in other parts of the country where nature is not so generous. Clothing, too, demands less from the mill employe's family budget in this section with its equable climate.

Surveys made by competent engineers give the facts about textile manufacturing cost factors at points in the territory served by Central of Georgia lines. To make these surveys available for you they have been printed in pamphlets. Write for them today.

J. M. MALLORY, *General Industrial Agent*
CENTRAL OF GEORGIA RAILWAY
413 Liberty Street, West,
Savannah, Georgia.

CENTRAL OF GEORGIA

PAULSON, LINKROUM & CO.

INC.

COTTON YARNS

of every description for Weaving and Knitting

We specialize in Cotton Yarns for Export

52 Leonard St., New York

PHILADELPHIA CHICAGO
PAWTUCKET CHARLOTTE, N. C.

TUCKASEGEE SPINNING CO.

Mount Holly, N. C.

38s & 40s All Plies and Descriptions

The high and uniform quality of these yarns is a result of eternal vigilance in every step from raw material to finished yarn.

Samples and prices cheerfully furnished.

H. A. James

SELLING THE OUTPUT OF OVER 150000 COMBED YARN SPINDLES IN N.C.
GEN. SALES MGR.
450 FOURTH AVE. NEW YORK. PHONES: ASHLAND 3930-31-32

Spinners Processing Co.

Ply Mercerized

The excellence of these yarns has built up a steady clientele among discerning knitters. Quality all the way through — uniformly spun yarns processed with modern equipment into mercerized yarns of notable lustre and dye effectiveness. Available in any form of put up — all counts.

Single Mercerized

Yarns of THE ELMORE COMPANY for exacting plaiting and splicing requirements. All counts — bleached, tinted, dyed.

Carded and Combed

The JOHNSTON YARNS have won a real reputation. Back of them is a corps of mills thoroughly attuned to one standard.

Johnston Mills Company

"Direct to Consumer"

SALES OFFICES:
NEW YORK: 93 Worth St. PHILADELPHIA: Public Ledger Bldg.
CHATTANOOGA: 805 James Bldg. CHARLOTTE: Johnston Bldg.
CHICAGO: 166 W. Jackson Blvd. READING, PA.

Forrest Mercerizing Co.

MERCERIZERS SINCE 1895

Specialists in

30/1
40/1
50/1
60/1
70/1
80/1
90/1
100/1
90/2
100/2
120/2
140/2

Super Quality Plaiting and Splicing Yarns

Tinted Yarns

(Reg. U. S. Pat. Off.)

Licensed under the Wilcox Patent No. 1,496,696

"It floats off the cone"

Try a Sample Case—Increases Production

Sales Office: FORREST BROTHERS
Forrest Bldg., 119 So. 4th St., Philadelphia

COTTON YARNS

Advance in Cotton Yarns at Chattanooga

CHATTANOOGA, TENN.—Advancing prices on mercerized yarns featured the week ending April 30 in the local yarn market. The advance on the two-ply mercerized price ranges from 1 to 3c. A leading broker reported that combed and carded yarns also advanced 2 to 3c.

An unusual feature of the situation is that different yarn men seem to have different prices. A well known yarn broker representing one of the larger mercerized yarn producers, announced new prices Saturday which showed 20s-2 at 58c; 60s-2 at 83c and 80s-2 at $1.08. A leading local producer quoted 60s-2 at 84 to 87c with 80s at $1.10 to $1.13. On 26s he quoted 60 to 63c.

Quotations on carded cones vary from 26½c to around 29c on 10s. Combed singles in 18s run from 37 to 40c. There was a big volume of business placed in the cotton and mercerized yarns, but little activity in silk or rayon.

Weeper Mfg. Co., Fultonville, N. Y., is again running its mill on full time following a curtailment.

Cotton Yarn Basis Varies

Small Stocks in Dealers' Hands Offered Radically Below Spinners' Figures

IT is a difficult matter to select any list of prices which are typical of the carded yarn market today. Prices vary with the evident condition of spinners and depend upon the statistical condition of various counts. On certain numbers it is evident there is more or less stock in dealers' hands and until this is absorbed buyers will be offered this yarn at a lower figure than they can secure the same counts from the spinner himself. The latter has, in the majority of instances advanced his price but this is not making the consumer any more amenable to arguments in favor of paying a higher price. He is combating all such effort, feeling that as long as he is being made offers below the figures which the spinner is asking, he is not justified in elevating his limits.

Inquiries Show Increase

It is the general report from the local selling market that more inquiries are being received from day to day and it is possible that the volume of business booked is somewhat better. With the market for cotton and yarn tending upward the buyer naturally feels he can anticipate more than he has been doing. There is no general move toward buying ahead, but in instances buyers apparently, instead of asking for just what they need for current demand, are willing to stock up for two or three weeks or even for a month. Beyond this the majority are unwilling to go. It is the usual experience that when a mill price is offered to the buyer he will retaliate with an alleged offer of yarns out of stock. In instances the absorption of such stock yarn is perdicted in the near future and it is believed that before long there will be a very close approximation between spinners' prices and those which are offered by the dealer. Of course there is always likely to be some difference where the yarn house is willing to take business on the basis of a split commission. This has become such a general practice, pursued over such a long period, that any deviation from it is most unlikely.

The Spinner's Position

While it is evident that a very fair number of spinners still have orders on their books which make it impossible for them to quote for immediate delivery, yet on the other hand it is the belief in selling markets that an increasing number of spinners are in need of business for the near future and that with a few at least stocks are available for immediate shipment. There is no talk of curtailment and if the market demand does not expand in the near future others may be in a similar position. On the other hand, if the raw cotton market should continue its upward swing, buyers may become convinced that the higher prices asked by the spinner are warranted and may take the yarn at the spinner's figures. Therefore, the conclusion of the latter to hold for higher figures may be found to be justifiable, even though it may mean current accumulation.

Flood's Practical Effect

Portions of the cotton belt inundated, as before pointed out, are those in which long staple cotton is grown for the most part. The effect on

Cotton Yarn Quotations

Carded—(Average Quality)

Double carded weav'g and knitt'g yarn 2c to 4c higher, according to quality

Single Skeins or Tubes—(Warp Twist)

4s to 8s	24½	—25	20s	28½	—29
10s	—	—25	24s	—	—31
12s	—	—25½	26s	32½	—33
14s	26	—26½	30s	—	—34
16s	—	—27	40s	43	—43½

Two-Ply Skeins and Tubes

8s-2	24½	—25	26s-2	32	—33
10s-2	—	—25½	30s-2	34	—34½
12s-2	26	—26½	36s-2	40	—41
14s-2	27	—27½	40s-2	43	—44
16s-2	—	—28	40s-2 High breakage	45	—46
20s-2	—	—28½	50s-2	51	—52
24s-2	31	—32	60s-2	57	—58

Single Warps

10s	—	—25½	24s	31½	—32
12s	—	—26	26s	—	—33
14s	—	—26½	30s	34½	—35
16s	27½	—28	40s	—	—44
20s	28½	—29			

Two-ply Warps

8s-2	—	—25½	24s-2	32	—33
10s-2	—	—26	26s-2	33	—34
12s-2	—	—27	30s-2	35	—35½
14s-2	—	—27½	40s-2 ordinary	44	—45
16s-2	27½	—28	50s-2	—	—52
20s-2	28½	—29	60s-2	—	—58

8s-3 and 4-ply skeins and tubes; tinged, 22-22½c; white, 24-24½c.

Hosiery Cones (Frame Spun)

8s	—	—24	22s	28½	—29
10s	—	—25	22s (silver Jaeger)	31	—32
12s	—	—25½	24s	—	—30
14s	—	—26	26s	—	—31
16s	26½	—27	30s tying in	—	—32½
18s	—	—27½	30s extra quality	34½	—35
20s	28	—28½	40s	—	—44

Combed Peeler—(Average Quality)

Warps, Skeins and Cones

26s-2	—	—42	50s-2	58	—60
30s-2	47	—48	60s-2	68	—70
36s-2	51	—53	70s-2	80	—85
40s-2	54	—56	80s-2	90	—95

Singles

12s	—	—37½	30s	47	—48
14s	—	—38	38s	—	—50
16s	—	—38½	40s	—	—52
18s	—	—39	50s	57	—58
20s	—	—40	60s	67	—70
24s	—	—43	70s	80	—85
28s	—	—46	80s	85	—87

Mercerized Cones—(Combed, Ungassed)

26s-2	60	—61	80s-2	1 08	—1 12
30s-2	62	—63	**Singles**		
36s-2	66	—68	30s	—	—85
40s-2	68	—70	40s	—	—88
45s-2	73	—76	50s	—	—93
50s-2	75	—78	60s	—	—1 03
60s-2	83	—87	70s	—	—1 17
70s-2	96	—1 01	80s	—	—1 55

Peeler—(Super Quality)

Single Cones

	Carded		Combed			Carded		Combed	
10s	30	—31	39	—41	26s	35	—36	46	—48
14s	31	—32	40	—42	30s	37	—38	50	—52
16s	31½	—32½	41	—43	36s	42	—43	55	—58
18s	32	—33	42	—44	40s	46	—48	58	—60
20s	32½	—33½	43	—45	50s	—	—	63	—65
24s	34	—35	45	—47	60s	—	—	73	—75

Combed Cones, Warps and Tubes

20s-2	44	—46	40s-2	57	—62
24s-2	46	—48	50s-2	62	—67
28s-2	48	—50	60s-2	70	—75
30s-2	50	—52	70s-2	80	—85
36s-2	54	—56	80s-2	95	—1 00

Combed Reverse Twist Thread Yarns—Skeins, Tubes or Cones 2, 3, and 4-ply

	Peeler				Sakelarides			
	Average		Best		Average		Best	
24s	—	—56	—	—61	74		78	—
30s	—	—58	—	—63	76		81	—
36s	—	—60	—	—65	78		83	—
40s	—	—65	—	—70	83		88	—
45s	—	—70	—	—75	88		93	—
50s	—	—75	—	—80	93		98	—
60s	—	—85	—	—90	1 05		1 10	—

Quotations are average prices of the counts and qualities indicated at the close of business May 4. They do not cover lower or higher qualities unless specifically noted. For New York spot cotton prices, see page 127. For staple cotton prices, see 129.

ABERFOYLE MANUFACTURING COMPANY

MERCERIZED YARNS

MAIN OFFICE
Bankers Trust Building
PHILADELPHIA

Mangum Street
HIGH POINT, N. C.

521 Court St.
READING, PA.

James Building
CHATTANOOGA, TENN.

323 So. Franklin St.
CHICAGO, ILL.

122 East 7th St.
LOS ANGELES, CAL.

Westaway Building
HAMILTON, CANADA

MILLS
CHESTER, PA.

Cotton Yarns—Continued

combed peeler yarn, as a result of curtailed production, has already been very appreciable. This section of the market is excited with prices nominal, for it is appreciated it is a difficult matter to name a figure that would represent a fair market price under present conditions. While carded yarn is affected only indirectly yet the probable spread between combed yarn prices and those on carded yarn may drive the buyer to a larger use of the latter just as in a similar disparity between white and tinged yarn a year or two ago. Of course there are uses for combed yarn in which the cheaper carded yarns cannot be employed, but at the same time there is the possibility frequently of changing from one to the other when the comparative cheapness of carded makes such a move desirable.

Price Basis Unsettled

The best illustration of the difficulty of establishing a basis and a relationship of one count to another can be found in knitting yarn. The average situation in these yarns is not as strong as on weaving yarns. The irregularity in evidence is undoubtedly caused by the availability of certain stock yarn which has been offered at low figures. On the cheaper counts, up to 12s and 14s, prices have been named that would indicate a basis of about 24c for 10s. As a matter of fact it is reported that a fair quantity of stock yarn was sold last week at 24c for 11s. From 14s up to 22s another basis is apparent, though here again exceptions have been noted. For instance a sale of 20s at 27½c may be mentioned but the 28c price is generally considered the market. This means that these counts are quoted on a basis of 25c for 10s. Again, on 30s anywhere from 33½ to 34c is quoted by certain mills, which means a still higher basis for 10s; this figure, however, it is felt, would be very difficult to obtain from the knitter who is operating in the most conservative manner due to the indifferent demand for his product.

Cotton Forces Advance

Fine Count and Combed Yarns Advance and Demand Quickens

BOSTON.—The continued advance in cotton futures has caused a further hardening of prices of medium and coarse count carded yarns, while all high grade carded yarns, together with fine combed and mercerized yarns have been advanced all the way from 2 to 5c a pound, depending upon quality and the character of demand. The market is naturally firmest on everything spun from extra staple cottons, the basis on which has been marked up an additional 50 to 100 points, making a net advance since flood conditions developed in the Mississippi and Arkansas Deltas of from 3 to 4c, including the advance in futures.

The majority of buyers have been slow to follow the advance in combed, mercerized and fine count yarns, but failure to get low bids accepted and to secure desired deliveries have stimulated more general buying for forward delivery at or close to full market prices. Some idea of prices may be gained from the fact that for an average quality of combed single yarn a basis of 39 to 40c is asked for 18s, and for super quality, 42 to 44c; for an average quality of 58s-2 combed peeler mercerizing warps 65 to 67c is asked, while for a high grade 60s-2 range is 70 to 75c, and from 95c to $1 for 80s-2 combed peeler warps. The market is almost equally firm on all super-quality, high-breakage carded skeins and warps, as high as 38 to 40c being asked for 30s-2 warps of this character and 47 to 48c for 40s-2 skeins and warps. The advance in mercerized yarn is quite as radical with few sellers below a basis of 85 to 87c for an average quality of 60s-2.

The radical advance in everything spun out of extra staple cottons is only what might have been expected to follow so radical an advance in the raw material, in view of the relatively low prices that have been ruling on such yarns for many months. By reason of large sales at comparatively low prices booked for a few weeks prior to the advance in staple cottons, the statistical position of the market on combed yarns has been rendered exceptionally strong, a very large proportion of the southern production being covered with orders through the summer months.

W. A. P. MacKnight Resigns from Russell Mfg. Co.

Wm. A. P. MacKnight, selling agent for the Russell Mfg. Co., Inc., Alexander City, Ala., cotton yarns, for the last ten years and one of the most widely known yarn salesmen in the country, is severing his connection with that company in the near future. Mr. MacKnight made his headquarters at Lafayette Bldg., Philadelphia. He expects to announce his plans in the near future in these columns. He has been selling yarns for more than 18 years, having been associated with the following concerns: Cannon Mills, Inc., William Whitman Co., and Franklin D'Olier & Co., Inc. He is well known in the New York and New England territories as well as in the Philadelphia market.

Safety Cable Co. Expansion

The Safety Cable Co., New York, large consumer of cotton yarns, has announced that it now controls the Phillips Wire Co. through the ownership of all the common stock and a majority of the preferred. It owns all the stock of the A A Wire Co. and has bought outright the business of the American Insulated Wire & Cable Co. of Chicago.

The officers of the Safety Cable Co. are now as follows: President, W. F. Field; vice-presidents, G. M. Haskell, G. T. Cottle and D. R. G. Palmer; secretary and treasurer, W. C. Hall; controller, F. E. George.

GROVES MILLS, Inc.

SUPER QUALITY
COTTON YARNS
COMBED PEELER, 24s to 80s, single and plies
CONES, TUBES, SKEINS AND WARPS
Samples and quotations promptly furnished
SALES OFFICE:
225 FIFTH AVENUE, NEW YORK
MILLS AT GASTONIA, N. C.

VAN COURT CARWITHEN
300 Chestnut Street, Philadelphia, Pa.
Sole Representative
SWIFT SPINNING MILLS
BRADLEY MFG. CO.
MUSCOGEE MFG. CO.
Whites, Stock, Dyed and Heathers
Cotton Yarns of Quality
ALL of COLUMBUS, GA.
FROM MILL DIRECT TO CONSUMER

BURNS-PARR, Inc.
COTTON AND RAYON YARNS
Mariner & Merchant Bldg. PHILADELPHIA
United States Representatives: HARWOOD CASH & CO., LTD.
Fine Yarns for Curtains, Lovers, Voile, Etc.
Mansfield, England

JAMES E. MITCHELL COMPANY
Cotton Yarns
Philadelphia Boston

FORREST BROTHERS
Forrest Bldg., 119 S. Fourth St., Phila., Pa.
Superior Quality Knitting Yarns
Sole Representatives
Bladenboro Cotton Mills—Vass Cotton Mills
8s to 30s Extra Carded

H.S.RICH & CO.
COTTON YARNS
180-182 SOUTH WATER ST
PROVIDENCE, R.I.

COTTON PRODUCTS COMPANY

Bankers Trust Building, Philadelphia, Pa.

Selling Agents for

SOUTHERN MERCERIZING COMPANY
Tryon, N. C.

Single Mercerized Yarns

A. M. SMYRE MFG. CO.
Gastonia, N. C.

Combed Peeler Yarns
30's to 70's

Weaving and Knitting

DIXIE MERCERIZING CO.
DIXIE
STRENGTH
QUALITY
LUSTRE
CHATTANOOGA TENN.

Fast Delivery Service

Daily 128 package cars radiate from Chattanooga to all parts of the Country. This fast delivery obviates the need for carrying large stocks on hand, thus reducing carrying charges and cutting down overhead. This fast delivery service is another reason why users of Dixie Yarns have Certified Satisfaction.

DIXIE MERCERIZING CO.
Spinners and Processors
CHATTANOOGA
Tennessee

BELMONT YARNS

ALL COUNTS UP TO 100'S
Single and Ply

MERCERIZED
DYED
BLEACHED
AIR DRIED

Samples—Gladly!

You may have heard about Belmont Yarns. Why not go a step further and ***see*** what they are—how they behave on your knitting frames or in the loom—into what kind of fabric they make up.

We repeat—samples gladly!

BELMONT PROCESSING COMPANY
(LINEBERGER-STOWE MILLS)
BELMONT, N. C.

Representatives
GRIFFITH & HURLBURT
510 James Bldg., Chattanooga, Tenn.

JOHN F. TRAINOR, Eastern Manager
17 East 42nd St., New York City, Murray Hill 0614

BELMONT YARNS

CONES COPS TUBES WARPS SKEINS

Cotton Yarns—Continued

Flood Unsettles Combed Yarns

Disaster in Delta Causes Further Advance in Fine Counts—Carded Not Affected

PHILADELPHIA.

YARNS made from long staple cotton are being drastically affected by flood conditions in the Mississippi valley and a number of large spinners of combed yarns have withdrawn quotations until the situation clarifies itself. Prices of fine counts of combed are practically nominal and where spinners and dealers are willing to quote, their prices are from five to ten cents above those of last week in such counts as 80s, which last week was being held by one of the largest combed yarn houses here at 85c for which they were asking this week up to 95c, according to the twist desired. This concern reports the sale of a considerable quantity of 70s-2 at the same price they were quoting 80s at last week.

One of the largest factors in mercerized yarns has advanced prices on finest counts, 90s-2 to 100s-2, even more drastically, advances averaging ten or more cents this week. Their price on 90s-2 combed peeler natural, for example, this week is $1.65 and $1.77 if gassed; 100s-2 were quoted this week at $2.00 or 15c higher if gassed. Another example which illustrates the excited condition of the long staple market as seen in both combed peeler and in mercerized qualities was seen when a mercerizer refused an offer made by a hosiery manufacturer who wanted to cover his requirements for a year ahead at current prices. The latter stated they were unable to take this business so far ahead even if they wanted as they could not, at this time, know whether they would be able to locate cotton suitable for this yarn, so that sale would be only a speculation.

Long Staples Advance

Spinners having only a limited amount of long staple cotton in their warehouse and therefore in the market for cotton, are being quoted extremely high premiums for long staples by cotton owners and this is why they are forced to advance prices on yarns made from such cotton. Staples of 1 1/16 in. and above are the ones more affected although all long staple is feeling the effects of the flood and becoming stronger; so that counts of yarn most affected to date have been 60s-2 and finer, although all counts from 40s-2 are higher. This trend was apparent in long staple cotton even before the flood, as spinners during recent years have been finding it more difficult to obtain large supplies of 1¼ in. and longer. The disaster in the Mississippi delta has brought this into sudden prominence and as higher premiums are asked for long staples spinners are forced to make corresponding advances in yarns in which such cotton is used.

Examples of this are seen when a comparison is made between last week's combed yarn quotations and those named during the current week. One of the largest spinners in the country quotes 40s-2 at 54c to 56c, 50s-2 at 58c to 60c, 60s-2 at 68c to 70c, 70s-2 at 80c to 85c, and 80s-2 at 90c to 95c. These prices are four to ten cents higher than the same concern was quoting two weeks ago for the same spinnings and from two to four cents higher than they quoted a week ago. It should be noticed, however, there is a wide variation between combed yarn quotations at present and it is possible to locate stock lots which owners will sell at considerably lower prices, but mercerizers, large buyers, report they are unable to locate spinners willing to take large orders at prices very materially different from the above mentioned combed spinner. Any large quantity of combed yarn bought would be within a cent or two of the prices quoted by this concern, as other spinners are quoting within a cent or two of these figures

Advance Too Rapid?

In view of such a situation it is more difficult than ever for manufacturers and mercerizers who do not have their own spinning plants to know what policy to pursue. Combed yarn houses here are in doubt as to the future as it applies to finer counts of combed yarns and feel that they will experience difficulty in obtaining suitable cotton during the coming season. On the other hand, there are other firms, who while they are wiling to agree the situation is serious and look for combed yarns to remain firm and even to admit further advances are near at hand, yet are advising their customers not to become excited as this will only complicate conditions.

They believe nothing will be lost by waiting for a short period to see what the condition of the long staple cotton sections is after the flood recedes and if time will be had, which many experts now doubt, for the planting of a long staple crop, which is the proper course to pursue at this time, to pay the advances and obtain yarn where possible or wait for these prices to be lowered by improvement in conditions will remain for the future to decide. In the meantime combed yarns are firmer than for many months and the trend still is upward.

Carded Yarns Dull

Carded section of the market presents an entirely different viewpoint. Spinners are firmer on the higher cotton market but manufacturers here are not following advances made in carded qualities, dealers finding it difficult to close business at the higher levels. Where dealers will sell at prices, near the former level a small amount of business is being booked.

CANNON YARNS

Cotton Yarns *of* Quality

Sometimes we lose a big order.

Customer says, to meet competition he can't afford to pay the slight difference for CANNON QUALITY.

But invariably his business returns to us in greater volume than before, which means but one thing:

Cheaper yarn does not necessarily lower the cost of the finished product.

THE CANNON MILLS
INC.
PHILADELPHIA

New York, Reading, Pa., Providence, Chicago, Chattanooga, Boston, Utica, N. Y.

THE STANDARD OF VALUE & QUALITY

SOUTHERN MERCERIZING CO.
TRYON, NORTH CAROLINA

Our Specialty—
SINGLE Mercerized

Yarn for Splicing and Plaiting

Single Mercerized Yarns up to 100/1—Also Two Ply Mercerized 100/s to 140/s
Tinted yarns Licensed under Patent No. 1,496,696.

Wire or write us for prices and samples

SOUTHERN MERCERIZING CO.
TRYON, NORTH CAROLINA

Sole Selling Agents for United States and Canada
Cotton Products Company
Bankers Trust Bldg., Philadelphia, Pa.

The Plush Yarn With The Velvet Feel

VELBLADE PLUSH YARNS

10/2 TO 30/2

Velblade Yarns are spun with special equipment expressly designed and installed for the manufacture of quality Plush Yarns for the highest grade fabrics.

THE Bladenboro Cotton Mills, INC.

Write for Samples

Sales Offices and Representatives
FORREST BROS.
FORREST BLDG. 119 So. 4th St. PHILADELPHIA, PA.

Cotton Yarns—Continued

Where they hold for the advances only dullness is reported. For example, spinners are quoting 36c for an ordinary grade 30s-2 warp but mills uptown assert they are able to obtain this count at 34½c and that they can buy for future delivery at 35c. A similar condition is found in 20s-2 for which the selling price to manufacturers has been around 28½c this week, although spinners are asking a cent higher.

Carded qualities are spotty with more interest in the knitting section than in weaving. Up-state knitters are taking fair amounts of yarn from time to time but weavers in this city are buying only in a small way, little interest being displayed in yarn for future delivery. This has been the case during the last three weeks and the drastic advances being made in combed yarns are not having an effect upon carded yarn consumers.

Cotton Wastes More Active

Strong Cotton Improves Situation —Strips in Demand

BOSTON.—There is more movement in the cotton waste market and most of it profitable. Some good business has been done in strips one house selling 1800 bales at 9½c f.o.b. Boston. Stocks of comber in sight are small and additional supplies are sporadic and in limited volume. Prices very generally are on the upgrade following cotton quite closely as it rises, remaining firm on downward fluctuations. The market has reached a good degree of stabilization and this is something that dealers have been anticipating for a long period and are now having the pleasure of enjoying. Larger interest is seen in picker and fly with users buying more freely. High linter prices are helping to create a more satisfactory demand for the usual stuffing wastes.

Choice comber and strips strictly on a percentage basis are of course advancing with cotton and even the materials like picker and fly are firmer. Sak. strips of the best quality are quoted around 15c while the best domestic white threads are 10½c-11c. The trade does not seem to be overburdened with any large quantities of material in the warehouses which is rather peculiar with the consumption of cotton and incidentally the output of wastes both at or near record high production.

All kinds of threads are strong not merely the threads to be used for machining into wiping wastes but the fine white cop waste which is shoddied into a very superior fiber where it not uncommonly comes into competition with comber. The supply is at all times very small. This is one of the export wastes. Manchester, when at all busy, is always ready to take on some of this good American material.

A favorable feature of the situation is the strength shown by cotton. It has been estimated by some authorities that the area covered by the flood represents more than one million bales of cotton. The consumption of cotton has been so good and the prospects of the cotton industry both abroad and home have been so much better that any likelihood of a short crop this season would operate as a strongly bullish factor both on cotton and its entire line of wastes.

Current Quotations

Peeler comber	13 —13½c.
Peeler strips	10½—11½c.
Egyptian comber	11½—12½c.
Choice willowed fly	5½— 6c.
Choice willowed picker	4 — 4½c.
Sak. strips	14 —15c.
Linters (mill run)	4½— 5c.
Spoolers (single)	10 —11c.
Fine White cop	11 —11½c.

Cotton Waste Elections

Annual Meeting of The Cotton Waste and Linter Exchange

BOSTON.—The annual meeting of the American Cotton Waste and Linter Exchange was held in this city, Tuesday, May 3, Clarence R. Smith of Philadelphia presiding. During the year of Mr. Smith's presidency the affairs of the exchange have been most satisfactorily administered, several important changes in its machinery have been instituted and the year closed with the treasury in very good shape. The gathering was somewhat informal covering a short speech by President Smith and the usual brief reports from the treasurer, W. D. Lane and the secretary, Samuel H. Roberts. Mr. Roberts in his report stated that there had been very few arbitrations during the year. Early in the year there had been a merger of the American Cotton Waste and American Linter Association. Recent changes in the by-laws of the combined association now made it possible for the board of arbitration to give quick action to members located in any part of the country.

The Board of Directors had a routine meeting before the association was called to order and voted to donate $500 to the American Red Cross Fund for the relief of sufferers in the South. This action of the directors was confirmed unanimously by the annual meeting.

A luncheon was served in the rooms of the association at the conclusion of which Secretary Roberts announced the result of the balloting for officers of the exchange, giving the list as follows: President, Michael F. Dunn; first vice-president, Russell N. Dana; second vice-president, Joseph I. O'Neill; secretary, Samuel H. Roberts; treasurer, Walter D. Lane. The following were elected directors for a period of three years; Jerry L. Windmullar, Josiah Butler, Louis Lichtenhiem, Walter E. O'Hara, Hans Lehner. For the Board of Arbitration the folowing were elected for three years: Henry F. McGrady, James R. Everett, Samuel L. Ayres; for two years, James J. White, Hans Lehner, Elisha Goodwin; for one year, Lawrence D. Chapman, George R. Winsor, John V. Pastorelli.

J. B. JAMIESON COMPANY
COTTON YARNS
77 SUMMER ST. BOSTON, MASS.

THE J. R. MONTGOMERY CO. WINDSOR LOCKS, CONN.
Manufacturers of
MERCERIZED COTTON YARNS Give the high Silk-like lustre
In Knit Goods and Woven Fabrics
NOVELTY YARNS Poucle, Bourette and Spirals in Cotton, Wool, Worsted, Mohair and Silk. COTTON WARPS On Beams, Jacks, Spools and Tubes In Fancy Twist, Colors and Printed.

MONUMENT MILLS, Housatonic, Mass.
HIGH GRADE COTTON YARNS, White, Colors, Bleached
On Beams, Jack Spools, Cones, Skeins and Chain Warps
FAST-BLACKS & COLORS { For Woolen Mills a Specialty } WE SELL DIRECT

GATE CITY COTTON MILLS
Manufacturers of
Superior Quality
WHITE KNITTING YARN on CONES
We sell direct to Knitters and guarantee satisfaction
217 Trust Co., of Georgia Bldg., ATLANTA, GA.

INDUSTRIAL YARN CORPORATION
Weaving—COTTON YARNS—Knitting
88 LEONARD STREET, NEW YORK

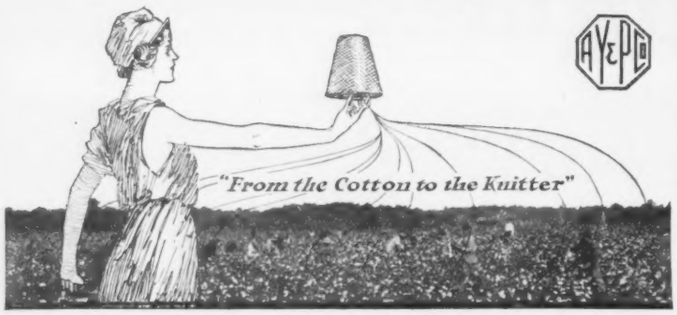
O. S. HAWES & BRO.
FALL RIVER, MASS.
COTTON YARNS ALL FORMS AND NUMBERS

JOHN F. STREET & CO.
COTTON YARNS
201 Industrial Trust Bldg., PROVIDENCE, R. I.
CHICAGO PHILADELPHIA NEW YORK

TILLINGHAST-STILES CO.
JESSE P. EDDY, Treas.
Cotton and Worsted Yarns
PROVIDENCE, R. I.
Room 922, Webster Bldg. 327 So. LaSalle St., Chicago

ORSWELL MILLS Fitchburg, Mass.
COTTON YARNS
Carded and Combed—Gassed and Ungassed

EWING-THOMAS CONVERTING CO.
Specialists in Mercerized Yarns CHESTER, PA.
Warp Mercerizing for the Trade
Gassed—Natural—Bleached—Colors
DOUBLE MERCERIZED SPECIAL PROCESS



Copyright, 1921, by A. Y. & P. Co.

AMERICAN YARN & PROCESSING CO.

General Office:
Mount Holly, N. C.

Spinners and Mercerizers

High Grade Combed and Carded Yarns

16s to 80s

Capacity 200,000 pounds of mercerized yarn a week

Our new equipment and plant addition have made it possible to double our production.

Sales Representatives

H. B. ROBIE
93 Worth St., New York City

HAROLD W. O'LEARY COMPANY
52 Chauncy St., Boston, Mass.

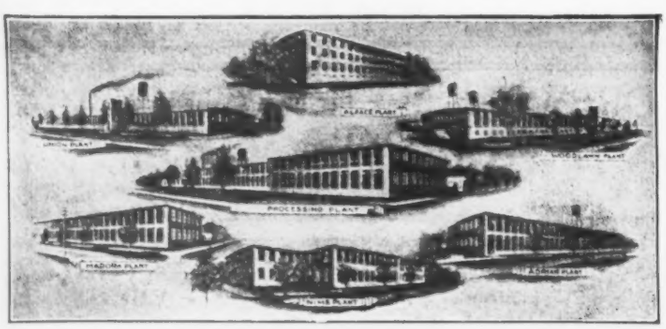
E. L. HICKS
904 Washington St., Reading, Pa.

R. D. McDONALD
924 James Bldg., Chattanooga, Tenn.

DAVID WHITEHURST
409 Parkway, High Point, N. C.

THOS. S. TULEY
1318 McHenry St., Louisville, Ky.

G. C. ELLIS
Fairleigh Crescent, Hamilton, Ont., Can.



Our Mercerized Yarns Are the Product of Our Own Mills

Quality First!

It is oftentimes easy to sidestep ***quality.*** However, here at National quality is given first consideration no matter what the cost.

If you are making a distinctive knit or woven product National Yarns will meet your requirements.

Write for samples

NATIONAL

YARN & PROCESSING CO.

Quality Mercerized, Dyed and Bleached Yarns

Provident Bldg., Chattanooga, Tenn.

CONES COPS TUBES SKEINS WARPS

MILLS - ROSSVILLE, GA.

Sales Offices

Chicago
M. A. Henderson,
186 W. Jackson Blvd.

Export Department
Provident Building,
Chattanooga, Tenn.

Charlotte, N. C.
Cosby & Thomas,
Johnston Building

Philadelphia, Pa.
Stewart McConaghy
6906 Cresheim Road

Fall River, Mass.
O. S. Hawes & Bro.

Reading, Pa.
Edward Shultz,
712 North 5th St.

Spun from selected cotton

DEPENDABLE YARNS

Cotton Yarns of Unvarying Quality for Knitting (underwear and hosiery) and Weaving

Cones, Skeins, Tubes
8s to 30s single; 8s to 16s ply

WINTHROP MINCHER
N. Y. State Rep., *Troy, N. Y.*

HENDERSON & HARRIET *Mills,* HENDERSON, N. C.

COTTON

Cotton Firm on Flood Situation

Prices Making New Highs for Season on New Crop Months

THE almost steady expansion of the flooded area in the Mississippi Valley following one break in the levees after another, and growing apprehensions as to crop prospects in that section have been reflected by increasing activity and strength in the cotton market last week. Prices for old crop positions have shown recoveries of about 3¾c per pound from the low levels of early last December while the new crop has made new high records for the season, selling above the 16-c mark with January selling at 16½c on Wednesday. Evidently the additional handicap on coming crop prospects resulting from the flood situation, has attracted speculative attention.

No one can at the present time, form any definite idea as to just what the effects of this year's unprecedented floods in the central belt will have upon the coming crop. The water is beginning to recede along the northern edges of the flooded area, and some planting has been reported in such sections by sowing in the mud as the water flows off. A Memphis correspondent says that the short staple area is not likely to be greatly affected by the flood, but that the long staple section is almost wholly flooded. He thinks that the reduction in short staple cotton from the flood will be negligible except locally, and many in the trade here believe that in lands surrounding the flood area acreage will be increased beyond original plans owing to the expectation of a decrease in the lowlands nearer the river.

The most definite reports on the amount of old crop cotton destroyed or damaged by the floods placed the amount of cotton submerged at 100,000 bales including 50,000 bales of long staples. A Memphis authority estimates that 30,000 bales of staple cotton has been practically ruined and that additional cotton has been damaged, but that most of the latter will be suitable for use in some form. Outside of the flooded area the crops would seem to have been making progress. More rain is needed in west Texas and along the Atlantic coast, and it seems rather ironical that the eastern and western extremes of the belt should be complaining of drouth, while the central part of the belt is covered by heavy rains and the flood waters of the Mississippi.

The situation in staple cottons is coming in for a great deal of bullish talk. There have been sharp advances in the market for Egyptian cotton in Alexandria as a result of American and Egyptian buying and reports from the goods markets have indicated some buying of yarns and cloths requiring staples for production, which may reflect a threat of a small American staple crop for next season.

The following table shows Wednesday's closing quotations in the leading spot markets of the country with the usual comparisons:

Market	April 27	May 5	Change	Last year	Sales
Galveston	15.05	15.70	+ 65	18.15	3,569
New Orleans	14.88	15.53	+ 65	18.00	4,238
Mobile	14.40	14.95	+ 55	17.50	616
Savannah	14.75	15.32	+ 57	17.90	1,361
Norfolk	14.75	15.38	+ 63	18.13	7,080
New York	15.30	15.95	+ 65	18.90	.....
Augusta	14.50	15.13	+ 63	17.63	3,254
Memphis	14.00	15.00	+100	18.00	16,925
St. Louis	13.75	14.00	+ 25	17.75	.....
Houston	15.05	15.65	+ 60	18.15	9,607
Dallas	14.20	14.80	+ 60	17.85	14,125

The following differences on the off middlings are given as compiled from the reports received by the New York Cotton Exchange. The cotton grades marked ** are not delivered on contract.

	Dallas	Memphis	Montgomery	Augusta	Average
WHITE GRADES					
M. F	1.50†	1.75†	1.25†	.90†	1.39†
S. G. M	1.25†	1.50†	1.00†	.75†	1.16†
G. M	1.00†	1.25†	.75†	.63†	.91†
S. M	.75†	.75†	.50†	.50†	.65†
S. L. M	1.00*	1.00*	1.00*	1.00*	.94*
L. M	2.25*	2.25*	2.00*	2.00*	1.99*
S. G. O.**	3.50*	3.50*	3.25*	3.25*	3.27*
G. O	4.75*	4.50*	4.25*	4.50*	4.42*
YELLOW TINGED					
G. M	.75*	.75*	.50*	.50*	.57*
S. M	1.00*	1.25*	1.00*	1.00*	.99*
M.**	2.25*	2.25*	2.25*	2.00*	2.10*
S. L. M**	3.50*	3.50*	3.50*	3.50*	3.35*
L. M**	4.75*	4.75*	4.75*	4.75*	4.69*
YELLOW STAINED					
G. M	2.00*	2.50*	2.00*	2.00*	2.04*
S. M**	2.50*	3.00*	2.50*	2.50*	2.51*
M.**	3.25*	3.50*	3.25*	3.25*	3.29*
BLUE STAINED					
G. M.*	2.00*	3.50*	2.00*	2.00*	2.00*
S. M.*	2.75*	3.25*	2.75*	2.75*	2.71*
M.**	3.50*	3.50*	3.75*	3.75*	3.60*

*Off middling.

Cotton Statistical Data

(Fluctuations of Futures)

	Closed Apr. 28	For week High	Low	Closed May 4	Net Change
May	15.05	15.74	14.94	15.64	+.59
June	15.19	15.74	15.11	15.74	+.53
July	15.33	15.98	15.18	15.85	+.52
August	15.43	15.96	15.33	15.96	+.53
September	15.57	16.07	15.43	16.07	+.50
October	15.64	16.30	15.45	16.15	+.51
November	15.73	16.24	15.58	16.24	+.51
December	15.82	16.47	15.65	16.33	+.51
January	15.88	16.50	15.70	16.36	+.48
February	15.96	16.46	15.79	16.46	+.50
March	16.04	16.66	15.84	16.53	+.49

Spot Fluctuations for Week

(Middling)

	New York	N. Orleans	Liverpool
Friday, April 29	15.30c	14.86c	.....
Saturday, April 30	15.30c	14.86c	.....
Monday, May 2	15.45c	15.09c	8.34d
Tuesday, May 3	15.75c	15.33c	8.53d
Wednesday, May 4	15.95c	15.53c	8.74d
Thursday, May 5	15.80c	15.42c	8.72d

Spot Fluctuations and Stocks

	Price May 4	Stocks This week	Last year
New Orleans	15.53	560,076	317,899
Mobile	14.95	32,875	9,085
Charleston	.....	51,515	29,901
Savannah	15.32	58,396	59,885
Galveston	15.70	383,847	387,447
Wilmington	.....	24,747	23,932
Norfolk	15.38	82,723	101,484
Augusta	15.13	84,440	59,016
Memphis	15.00	171,103	257,367
St. Louis	.....	5,050	15,617
Houston	15.65	572,423	513,655
New York	15.95	224,722	25,786
Little Rock	15.10	26,728	46,469

Samples

How will Quissett Yarns work in for my needs? True, Henry Brown uses them and speaks highly of them but. . . . The answer is—*samples.*

Sending to Quissett headquarters doesn't obligate you in the least. We have always urged sampling as a simple convenient method of determining the fitness of our product for your product.

What count—twist—and put-up? We'll supply the samples gladly!

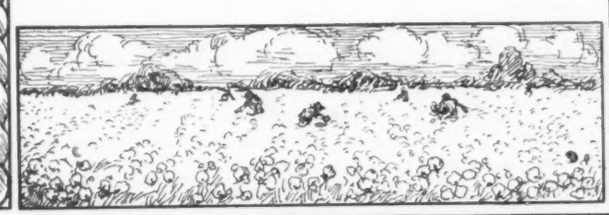
Carded and Combed Cotton Yarns in all Numbers and Descriptions.
Ply Yarns our Specialty.
Egyptians, Sea Island, Peelers, Sakelarides, Pimas and Peruvians.

Quissett Mill

New Bedford, Mass.

Wm. M. Butler, Pres.
Edward H. Cook, Treas.
Thomas F. Glennon, Agent

QUISSETT MEANS QUALITY



S. L. DIGGLE MANAGER

ACME
SALES COMPANY

JOHNSTON BLDG. CHARLOTTE N. C.

CARDED-COMBED-MERCERIZED
COTTON YARNS
ALL COUNTS AND DESCRIPTIONS FOR THE KNITTING-WEAVING-CONVERTING TRADE

REPRESENTING DIXIE MERCERIZING CO. CHATTANOOGA, TENN. LUSTRE QUALITY

CONTROLLED MANUFACTURE
IN NORTH CAROLINA

Woolmix
The Yarn of Adaptability
THOMAS HENRY & SONS INC.
NASHVILLE — TENNESSEE
Makers of Yarn Since 1881

The Halliwell Company
Dyers, Bleachers and Mercerizers of Cotton Yarns in Warps or Skeins
High Class Mercerizing in Warps Only
Fast Colors a Specialty
A new plant, latest and most modern machinery and equipment, backed by thirty-five years of specialized experience, guarantees service and satisfaction.
The Halliwell Company
PAWTUCKET, RHODE ISLAND

COTTON YARNS PLUS SERVICE
ANY COUNT OR VARIETY
EASTERN OR SOUTHERN
GREY OR PROCESSED
Advice Based on Our Experience of Thirty Years in Bleaching, Dyeing, Mercerizing, Etc., at Your Service
E. J. McCaughey, 51 Arlington St., Pawtucket, R. I.

SOLWAY DYEING & TEXTILE CO.
PAWTUCKET, R. I.
Dyers, Bleachers and Mercerizers of Cotton Yarns, Warps or Skeins
ABSOLUTELY FAST COLORS

DURHAM SPINNING MILLS HOLLAND & WEBB, Ltd.
J. BLACKWOOD CAMERON
American Casualty Bldg. Reading, Pa.
COTTON YARNS
Comber Carded Mercerized
Representatives
Philadelphia: CAMERON & PFINGST, 308 Chestnut St.
Chattanooga: R. D. McDONALD, James Bldg.
Statesville, N. C.: D. F. WALLACE, Jenkins Bldg.

WM. WHITAKER & SONS
Olney, Philadelphia
COTTON CARDING and CARDED COTTON
Roving, Shuttle Cops, etc.

COTTON WARPS
DANA WARP MILLS Westbrook, Maine
Cotton Yarn and Warps, Carded and Combed
WHITE and COLORED SINGLE and PLY SELL DIRECT

WINWOL YARNS
High Grade—Mule Spun
10-50% Wool Content
WINTHROP COTTON YARN CO.
Taunton, Mass.

STEVENS YARN CO., Inc.
86-88 Worth St. N. Y. City
COTTON YARNS
Selling Agents for
LILY MILL & POWER CO. Combed Rev. Thrd. 24s to 50s
MELVILLE MFG. CO. Carded 26s to 30s
RHYNE-HOUSER MFG. CO. Combed 50s to 60s
STEELE COTTON MILL CO. Carded 26s to 30s
STAR THREAD MILLS Carded 24s
PRINCETON MFG. CO. Carded 20s
H. C. TOWNSEND COT. MILLS 8s Carpet Yarn
ROYALL COTTON MILLS Carded 20s
MULTIPLE END ELECTRICAL TUBES Combed & Carded 40s to 120s
CHICAGO PHILADELPHIA
PROVIDENCE CHARLOTTE, N. C.

PHILA. COTTON YARN CO.
COMBED CARDED YARNS KNITTING WEAVING
135 S. 2nd St., Philadelphia

LINEN YARNS for Hosiery
Weaving and Twisting
Jute, Hemp and Ramie Yarns
Flax Jacquard Harness Twine
Flaxnoils — Flaxwastes — Ramienoils
ANDREWS & COOK, INC.
66-72 Leonard St. NEW YORK

ROCKFISH MILLS, INC., Rocky Mount, N. C.
Wish to announce the opening of their New York offices at
456-460 Fourth Avenue, New York City
under the sales management of Mr. H. Gray Dolliver.
Karded Peeler yarns of high grade will be sold direct to the Trade in numbers ranging from 26s to 40s, single and ply.
Telephone Ashland 4342

BOOTT MILLS
REG. U.S. PAT. OFF.
COTTON YARN
LOWELL, MASS.
TEL. 4410

Cotton—Continued

Cotton Holders Sit Tight

Buyers Let Market Alone and Result Is Quietude

MEMPHIS, TENN., May 2.—Good inquiry for staples has developed but both new bookings by shippers and sales at first hand are small owing to light offerings and the poor quality thereof. Shippers do not appear to be in urgent need of cotton to fill old commitments and there is no evidence of investment buying. The staple association reports that its sales and fixations combined made the largest single week's business this season, which is attributed to mill apprehension growing out of the acuteness of the flood situation in the alluvial sections of Arkansas and the Yazoo delta.

Demand is said to be for all qualities of staples at advances compared with a few weeks ago. Some claim that a small supply of staples from the new crop is inevitable, while it is generally agreed that the lateness of the flood places the staples areas under a handicap that will be most difficult to overcome. More than one-third of the Yazoo delta is under water and about an equal acreage in the alluvial sections of Arkansas; a combined area equal to a little more than two-thirds of the Yazoo basin. It is not unlikely that the eastern one-third of Louisiana, west of the Mississippi River will be under water before the flood is over; much of northeastern Louisiana is already inundated from crevasses along the Mississippi and Arkansas rivers. The flood is from two to six weeks later than previous severe floods and the waters are not yet receding at a time when planting should be nearing completion. It would be folly to say that none of the flooded lands will be planted to cotton, but a large reduction in acreage seems inevitable. Owners of cotton, cognizant of the prospect, are definitely disposed to wait, feeling that they have more to gain than to lose.

Sales were made during the week at the following prices: Good middling 1⅛ to 1 3/16" at 20c., strict middling 1⅛ to 1 3/16" at 19½c., strict middling 1⅛" at 19c., middling full 1⅛" at 19c., good ordinary and strict good ordinary 1 1/16" at 10c., low middling 1" plus at 12½c., strict good ordinary 1" at 10½c., strict middling 15/16" at 15⅝c. Except for unfavorably low temperatures early in the week weather conditions over the belt have been excellent. Eastern Oklahoma and parts of the central belt received light to moderate rainfall, which was unwelcomed, on one or two days, but this was more than offset by beneficial rains in dry sections. Some cotton was killed in Texas and Alabama by frost but the damage does not appear to have been extensive. Low temperatures over the entire belt late in the previous week and early last week checked germination and growth but without much serious damage. Progress elsewhere than in Olkahoma and central belt is fully average. Planting on well drained lands in Oklahoma and central belt, at a standstill for about three weeks on account of wet weather, resumed during the week.

Market Statistics

Basis Middling

	Saturday, April 30	Saturday, April 23
10 markets average	14.53	14.44
Memphis	14.50	14.00

Premium Staples

First Sales from Factors Tables at Memphis

Grade Strict Middling	Prices Firm
1 ⅛-in.	17¾@18¼c
1 3/16-in.	20¾@21¼c
1 ¼-in. nominal	24 @25c

Current Sales

	For week	Prev. week	*Week before
Memphis total	15,050	14,775	13,450
F. o. b. included	10,600	11,950	10,550
10 markets	47,235	52,388	48,460

Memphis Receipts, Shipments, Etc.

	For week	Last year	Year before
Net receipts	4,721	3,651	1,307
Gross receipts	21,680	13,520	8,107
Total since Aug. 1, net	755,923	718,786	421,202
Shipments	30,137	18,928	12,679
Total since Aug. 1	2,088,501	1,522,259	1,245,113
Total stock	173,907	260,201	37,051
Decrease for week	8,457	5,408	4,662
Unsold stk in hands of Memphis factors	63,000	98,000	.....
Decrease for week	3,000	2,000	.....

* Five days.

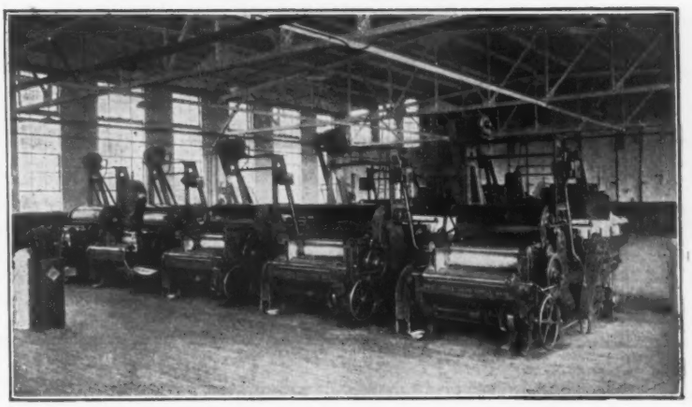
Staple Cottons Soaring

Short Yield of Extra Staples and Egyptians Forecast

BOSTON, May 14.—Reasonable certainty that the acreage and yield of domestic extra staple cottons longer than full 1⅛ in. is to be curtailed has stimulated a sufficient demand for these and for shorter staples to make a run-a-way market and allow shippers to ask almost any premium for cottons of desirable grades. On the longer staples selling prices have advanced at least 200 points for middling, with many sellers refusing to quote on higher grades; some shippers are holding for a further advance of 100 to 200 points and practically all are refusing to quote for distant or new crop delivery. Basis on 1⅛ in. has advanced not much more than 50 points, while on shorter cottons the advance is merely that on futures without any important change in premiums. Some shippers with cotton marooned in the flooded districts are paying substantial premiums to be released from contracts, in some instances 4 or 5c a pound.

Whereas two or three weeks ago it was possible to buy strict middling practically at the price of middling when shipments of both grades were involved, premiums on strict are now considerably above the normal and on cottons longer than full 1 3/16 in. are as much as 300 points above middling. Practically all cotton is being sold only on actual samples. The best available opinion is that the reduction in acreage and yield of cottons longer than full 1⅛ in. will be a minimum of 25 to 50%, and may be reduced more than this if a large amount of suitable seed has been destroyed as reported. Classers now in the South picking up cotton warn mills to be on the lookout

(*Continued on page 149*)



PICKER ROOM
STANDARD-COOSA-THATCHER CO.
CHATTANOOGA, TENN.

The dependable strength, lustre and uniformity of STANDARD MERCERIZED YARN insures unusually satisfactory results in combination with Rayon for both knitting and weaving.

STANDARD-COOSA-THATCHER CO.
Chattanooga, Tenn.

SALES OFFICE: LAFAYETTE BLDG., PHILADELPHIA

Canadian Representative:
WM. B. STEWART & SONS, LTD. TORONTO — MONTREAL

Standard
MERCERIZED YARN

JAMES LEES & SONS CO.

Manufacturers of

WORSTED AND WOOLEN **YARNS**

for Weaving and Knitting

also

Minerva Yarns for Hand Knitting and Crocheting

Mills and Main Office — Bridgeport, Pa.

New York Office—230 Fifth Avenue

BOTANY WORSTED MILLS, PASSAIC, N. J.

FINE FRENCH SPUN WORSTED YARNS

Of Every Description for Knitting and Weaving

Represented by

WALTER D. LARZELERE

PACKARD Bldg. PHILADELPHIA — 200 Fifth Ave. New York

THE PITKIN WORSTED CO.

ESTABLISHED 1885 — PASSAIC, N. J.

Knitting and Weaving Yarns of Quality
White, Colors and Heather Mixtures

Sell Direct and Through

WALTER D. LARZELERE, 1706 PACKARD BLDG., Philadelphia, Pa

THOS. WOLSTENHOLME SONS & CO., Inc.

Frankford Ave. & Westmoreland St. — Philadelphia, Pa. — P. O. Station "E"

UNDERWEAR HOSIERY
SWEATER WEAVING

YARNS

COLORS, OXFORDS AND FANCY MIXES

French and English Spun Worsted
French Spun Worsted Merino

Representatives: BOSTON—E. Geoffrey Nathan, 69 Prentiss St.
LOS ANGELES—Arthur Bone, 698 S. Rio St.
CHATTANOOGA—Campbell & Van O'Linda, 1023 James Bldg.

PASSAIC WORSTED SPINNING CO.

PASSAIC, N.J.

MANUFACTURERS OF

TOPS AND WORSTED YARNS

ENGLISH SYSTEM

Sales Representatives

TOPS: W. C. GAUNT & CO. 212 SUMMER ST. BOSTON — 120 CHESTNUT ST. PHILADELPHIA

YARNS: J. E. DUVAL 308 CHESTNUT ST. PHILADELPHIA

FRENCH SPUN MERINO

MOHAIR **WORSTED** WOOLEN

FRENCH AND BRADFORD

YARNS

OF EVERY DESCRIPTION

PERCY A. LEGGE

BOSTON — PHILADELPHIA — CHICAGO

New York Agency: Metropolitan Bldg.

GRUNDY & CO., INC.

108 S. Front Street, Phila.

Tops and Worsted Yarns

FOR

Men's Wear, Dress Goods and Knitting
Trade both in Grey and Mixtures

WILLIAM RYLE & CO.

381 Fourth Ave. New York
Cor. 27th Street

Thrown Silk Yarns

For Silk, Woolen Worsted Cotton and Knitting Mills

Star Worsted Company

YARNS

FITCHBURG MASS.

O. J. CARON

WORSTED AND WORSTED MERINO YARNS

166 W. JACKSON BLVD., CHICAGO

WM. H. RICHARDSON — WORSTED YARNS

Cranston Worsted Mills, Bristol, R. I.

WORSTED, MOHAIR AND NOVELTY **YARNS**

JOS. M. ADAMS COMPANY

Manayunk, Philadelphia, Pa.

Spinners of

WORSTED YARNS

(Bradford System)

for Weavers and Knitters

Rockwell Woolen Co.

Leominster, Mass.

Manufacturers of

WOOLEN and MERINO **YARNS**

FOR WEAVING and KNITTING

Heather a Specialty Mixtures and Decorating Yarns

THE YEWDALL & JONES CO.

Manufacturers of WORSTED YARNS

In the gray and in all colors: also fancy mixtures and double and twist

PHILADELPHIA, PA.

Maanexit Spinning Co.

WEBSTER, MASS.

Spinners of

FINE WOOLEN AND MERINO Weaving Yarns

ALSO KNITTING YARNS

GARTH MFG. CO.

RAYON SILK TOPS, NOILS AND CARDED STOCK

For Knitting and Weaving Yarns

Tel. 4511 Passaic.

72 Summer Street, Passaic, N. J.

WORSTED YARNS

Fair Deliveries on Top Contracts

New Business Small—Noils Heavy —Imports of Cashmere and Camelhair

BOSTON.—Business in the top market is still poor. Prices are unchanged for the week and seem to have reached a firm position on the low edge of quotations. There are no signs of any bulk business pending. Some combers look for a delayed heavyweight season to bring in considerable business somewhere around the time that lightweights ought to be of interest. Deliveries on new orders are being taken as fast as produced but there is some "stalling" on old contracts. Output is decreasing. Wool comb activity declined 8% in March and there was further falling off in April. New business has been placed during the week in most grades of tops but in very small lots, ½ blood being chiefly in favor. The Bradford market is firm with fine tops up ½ penny for the week.

The noil market last week was exasperatingly slow for dealers and there was enough competition for the small amount of business offered by the mills to prevent any hardening in values. The tendency is downward. Some of the mills producing noils are asking high prices. In one case as high as 84c was the price put upon a lot of Australian 70s and 77c was asked for another accumulation of 64s. There are good noils but in the present inert situation they are too high for dealers. It is open to question whether the demand for year to date has been sufficient to absorb incoming supplies let alone make any inroads on the accumulation held in this city as of December 31, amounting to 1,292,000 pounds. The March report this year is likely to show a marked increase over this figure. In March last year total stocks were 869,000 pounds.

Top and Noil Quotations

Tops—Boston		Nominal
Fine	(64–66s)	$1.35–$1.36
Super 64s Aus.		1.53– 1.55
Half-blood	(60–62s)	1.23– 1.25
High ¾ blood	(58s)	1.12– 1.14
Aver. ¾ blood	(56s)	1.06– 1.08
Low ¾ blood	(52–56s)	1.00– 1.02
High ¼ blood	(50s)	.94– .95
46s		.87– .88
44s		.82– .83
40s		.80– .81
38s		.80– .81
Tops—Bradford		
Fine	(70s)	53½d
Fine	(64s)	48d
Half-blood	(60s)	44d
Half-blood, low	(58s)	41d
Three-eighths blood	(56s)	34d
Quarter-blood	(50s)	27d
Cross-bred	(46s)	21d
Noils—Boston		
Fine		$.72– $.75
Half-blood		.65– .68
High ¾ blood		.55– .60
Aver. ¾ blood		.50– .55
Low ¾ blood		.51– .52
High ¼ blood		.48– .50
46s		.45– .50
44s		.45– .50
40s		.45– .50

Finer Dress Goods Favored

Worsted Mills Attempt to Regain Business Lost to Silk Fabrics —Outlook Brighter

PHILADELPHIA.

THERE are definite indications manufacturers of worsted dress goods in this country are making a more determined effort than ever before to secure a larger share of the dress goods business, that for several years past has been largely monopolized by silk and other materials of extremely light weight. Worsted dress goods manufacturers have been experiencing a difficult period since the popularity of silk dress goods reduced the interest in worsted fabrics to a small volume, smaller than would have been believed possible five years ago. For a time this trend away from wool and worsted fabrics for dresses was felt by this group of manufacturers to be merely a style trend and one for which there was little or nothing that they themselves could do to aid the situation. The feeling was this style trend to silk would have to "run its course" and in a comparatively short time demand for worsted dress goods again would return.

This has not been the case. Season after season and year after year worsted dress goods have lost ground to silk fabrics and there has been until recently no indication that the style pendulum was turning in the opposite direction that would give worsted dress goods manufacturers anything approaching their former volume of business. Finally a number of these manufacturers decided that unless energetic steps were taken immediately then there was the possibility this ground lost to silk would never be retrievable. As a result they began to devise ways and means of combating this inroad upon their former market and to devise methods of getting at least a portion of it back again. Several of the more important dress goods manufacturers in this vicinity sent representatives abroad to make a study of this situation in England and France to see in what way worsted manufacturers in these countries were meeting the same situation. They also wanted to see what types of worsted fabrics were being made in other countries that would appeal to the general demand for light-weight fabrics, brightly and attractively styled.

Light-Weight Fabrics Wanted

After making an exhaustive study of conditions abroad many manufacturers came to the conclusion one of the best ways to approach the problem would be for worsted manufacturers to meet silk upon its own ground and for them to produce fabrics that would be little heavier than silk dress goods and yet be made from wool or worsted yarns. They felt the thing to be done was for them to make a type of dress fabric lighter in weight than had been made in this country and to style them in a more attractive manner than had yet been done. Following this line of attack a number of Philadelphia manufacturers showed for the first time a year ago fabrics made from finer yarns than had been used for this purpose, made from Australian wool and spun in finest counts our machinery could produce, a number of mills finding it necessary to use finer counts than they were able to obtain from our machines.

Style Shows Helping

Through various means such as direct advertising in fashion magazines of national circulation and through style shows, such as was held in Philadelphia last week, these new lines of dress goods made a favorable impression upon the public and a fair volume of business was done during the last year by a number of manufacturers but the improvement was not generally noticeable in the local trade, a majority of mills here reporting a small volume of business during this time on worsted dress fabrics. However, further and more noticeable progress in this direction is now reported and a number of manufacturers are now making dress goods for next season's wear that will weigh only from four to six ounces and which are reported to be among the finest fabrics ever produced in this country, their weight being little more than that of silk goods.

Fine Counts of Yarns Used

In this connection it is important to note that there is now a better demand for fine yarns that go into such lines of goods and from this it may be assumed these newest fabrics are finding increasing interest from buyers this season than heretofore. Those factors in the trade in closest touch with this development are predicting a larger volume of worsted dress goods business this season than has been experienced for at least five years and there are definite signs in the yarn trade that light-weight worsted dress goods are making headway in the favor of the public. Assuming this trend will continue and develop into fair proportions, as is now generally forecast, then it may be stated a definite change will also be felt in the yarn market.

Should demand for especially fine counts of worsted yarns required for such fabrics be sufficient to cause a number of fine yarn spinners, who have during recent years turned their production over to coarser counts, this will soon be noticeable in the yarn market. It would mean competition on coarser counts would be less severe after fine yarn spinners returned to their former field and would also mean production of worsted yarns would be reduced, as the amount of such fine counts a spinner can produce is materially reduced when fine numbers are having the call. This in fact has the same effect as would the scrapping of a certain number of spindles; the net result would be the same. Poundage of worsted yarns produced by these fine yarn spinners would be reduced when they turned their plant over to spinning of such counts as 50s, 60s, 70s and 80s as compared with former counts, 40s for example.

Australian Wool Used

The new dress fabrics are made from 60s, 70s and 80s all being hard twist and many manufacturers are also specifying that the yarn be gassed, being spun from Australian wools. While it is admitted spinners would prefer to spin larger quantities of coarser counts than the relative small production they would secure

WORSTED YARN QUOTATIONS

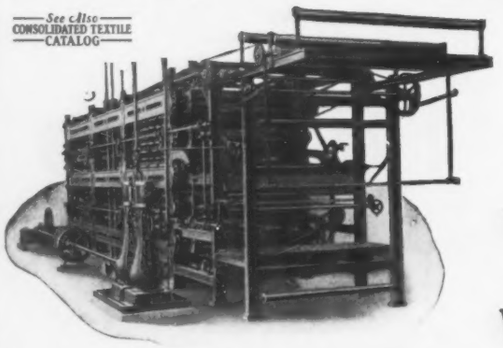
(Corrected to Close of Business Wednesday)

Bradford System	
2-12s, low com. (36s)	1.05–1.10
2-16s, low com. (36–40s)	1.10–1.15
2-20s to 2-24s, low ¼ (44s)	1.10–1.15
2-20s to 2-26s, ¼ bld. (46–48s)	1.20–1.26
2-26s to 2-30s, ¼ bld. (48s)	1.30–1.35
2-30s to 2-32s, ¼ bld. S. A (46s)	1.35–1.37½
2-32s, ¼ bld. (48–50s)	1.37½–1.40
2-20s, ⅜ bld. (56s)	1.40–1.45
2-26s, ⅜ bld. (56s)	1.45–1.50
2-36s, ⅜ bld. (56s)	1.50–1.55
2-32s, ½ bld. (60s)	1.65–1.70
2-36s, ½ bld. (60s)	1.70–1.75
2-40s, ½ bld. (60–64s)	1.75–1.80
2-50s, high ½ bld. (64s)	1.90–1.95
2-50s, fine, (66–70s)	2.00–2.05
2-60s, fine, (70s)	2.65–2.70

French System	
20s, high ¼ bld. (50s)	135.–1.40
20s, ⅜ bld. (56s)	1.45–1.50
30s, ⅜ bld. (56s)	1.55–1.60
30s, ½ bld. (60s)	1.70–1.75
40s, ½ bld. (60–64s)	1.85–1.90
50s, (66–70s)	2.10–2.15
60s, (70s)	2.70–2.75
Knitting Yarns in Oil (Bradford)	
2-20s low ¼ bld. (44s)	1.10–1.15
2-18s to 2-20s ¼ bld. (50s)	1.20–1.22½
2-26s, ¼ bld. (50s)	1.26–1.28½
2-30s, ¼ bld. (50s)	1.30–1.32½
2-20s, ⅜ bld. (56s)	1.40–1.45
2-20s, ½ bld. (60s)	1.70–1.75
French Spun Merino White	
30s, 50–50	1.30–1.35
30s, 60–40	1.42–1.45
30s, 70–30	1.54–1.59
30s, 80–20	1.65–1.70

Tentering and Drying Machines

See also CONSOLIDATED TEXTILE CATALOG



For All Classes of WOOLENS and WORSTEDS

Also Chinchilla Machines, Fulling Mills, Cloth Washers and Crabbing Machines

D. R. KENYON & SON, Raritan, N. J.

Established 1870

JOHN HEATHCOTE & SON, INC.

Providence, R. I.

TENTERING AND DRYING MACHINES

For Woolens, Worsteds, Felts, Etc.

UPRIGHT—HORIZONTAL

See also CONSOLIDATED TEXTILE CATALOG

TWENTIETH CENTURY

A Popular Warp Dyer

Warp dyeing requirements are most exacting. Nobody knows this better than the makers of the Reliance Warp Dyeing Machine. The result is a machine that rates high. We shall gladly supply further particulars.

RELIANCE MACHINE WORKS

Hedge and Plum Sts., Frankford, Phila., Pa.

WOOLENS COTTONS

SJÖSTRÖM Patent Cooling and Conditioning Machines

A positive necessity for every textile manufacturer

MANUFACTURERS MACHINE CO.

North Andover,

WORSTEDS Mass. SILKS

See also CONSOLIDATED TEXTILE CATALOG

THE

DANA S. COURTNEY COMPANY

Chicopee, Mass.

Manufacturers of a Complete Line of

Bobbins, Spools and Skewers

for Cotton, Woolen and Jute Mills

Warp and Filling Bobbins a Specialty

See also CONSOLIDATED TEXTILE CATALOG

Send Us a Sample of Your Requirements

Southern Agent—A. B. Carter, Gastonia, N. C.

TEXTILE ROLL & SUPPLY CO.

Roll Specialists

ORANGE, MASS, U. S. A.

Branch Office: 303 Clifton St. MALDEN, MASS.

Rolls for Textile Dyeing, Washing, and Bleaching Machinery, Carbonizers, Conveying Equipments, and Paper Mill Machinery.

LUCKY ROLLS

Special Improved Construction with *Spiral-Winged Gudgeon*

CANNOT SLIP

CANNOT MOVE

Selected Adirondack and Vermont Maple Rolls for all Textile and Paper Mill Uses.

Reels for any Requirements. Fulling Machinery for Felts and Woolens. Piece Dyeing and Bleaching Machines. Wood Tubs and Tanks. Washers and Carbonizers.

WRITE US for Full Information, Diagram Sheets, etc.

DIAMOND FINISH

THE WHITINSVILLE SPINNING RING COMPANY

SPINNING RING SPECIALISTS

ESTABLISHED OVER 50 YEARS

WHITINSVILLE MASSACHUSETTS

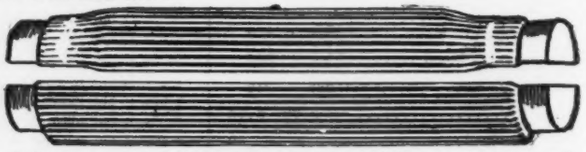
SPINNING, SPEEDER *and* MULE ROLLS

RENECKED, REFLUTED AND HONED

NEW FLUTED ROLLS OF ANY SIZE MADE TO ORDER

George A. Bates Flute Raising Machine for raising worn out Drawing Rolls like this or comber Detaching Rolls.

WORN ROLLS MADE NEW



Returns the Rolls with worn ends of delivery to the original size of new roll. Guaranteed not to change draft of roll.

Speeder Spindles. *Flyers and Pressers repaired or new ones made to order.*

G. A. BATES & SON **876 Broadway, Fall River, Mass.**

Worsted Yarns—Continued

when working on such fine numbers, it is possible the margin of profit in finer counts would more than offset the volume business than could be done in coarser numbers; so the larger volume of business would not be so attractive financially as would the smaller amount of fine count yarn business on which a profit could be made. For these reasons this trend in dress goods will be eagerly studied by wool trade, spinners and manufacturers during the coming months.

Semi-Stagnant Yarn Market

Spindle Activity Declined in March But More Wool Used

BOSTON.—The market is still semi-stagnant. Prices on worsted yarns whether merino or crossbred are considered to be about as low as they can be forced under any ordinary methods of doing business. Distress lots and accumulations for which mills have no further use sell below the market but do not make the market at this time. The spinning industry whether in Boston or Bradford is operating under very similar conditions featured by relatively high raw material values and pressure for cheaper fabrics from the distributing end of the industry.

Although there was a marked increase in the amount of wool going through the mills in March a decline in the active spindle hours was recorded for wool combs and worsted spindles as the following table shows:

	March	February	January
Wool Combs ...	81.4%	89.4%	83.9%
Worsted spindles	66.2%	71.2%	74.6%

In absence of any real volume of inquiry from the Bradford district competition for business is exceptionally keen resulting in margins being cut very fine, if not entirely lost. The inability of spinners to obtain business at prices commensurate with top values is strongly in evidence. Orders are being placed in some of the fine yarns two pence below replacement costs, it is said. More business, particularly in crossbred yarns, could be placed at old basis of prices made by wools at the close of the year. The easy tone at the London opening was regarded with satisfaction by manufacturing interests generally.

BRADFORD YARN PRICES

	s	d
2-16s, 36s	2	2
2-24s, 44s	2	5
2-36s, 58s	4	4
2-48s, 64s	5	5
2-60s, 70s	6	5

Roosevelt Knitting Mills, Philadelphia, is the name of a new concern that is starting operations at 320 Cherry St., where they will manufacture sweaters and bathing-suits. Their equipment consists of 7 knitting machines, 1 winder, 10 sewing machines, 1 pressing machine and 1 seamer. L. S. Casten is the proprietor of the new concern and he will also do the buying, the firm using both worsted and cotton yarns. Their selling arrangements will be announced in the near future.

Speaker for Worsted Spinners' Luncheon

Hugh Bancroft, vice-president and director of the Boston News Bureau, will address the National Association of Worsted and Woolen Spinners at the luncheon in connection with the annual meeting on May 11 at the Waldorf-Astoria, New York City. Mr. Bancroft will select his own topic and this has not been announced as yet.

C. M. Patterson Removes Offices

C. M. Patterson, Chicago representative of Dearnley Bros. Worsted Co., Philadelphia, Jules Desurmont Worsted Co., Woonsocket, R. I., and Excelsior Mills, Union, S. C., has removed his offices to Room 653 in the new Adams-Franklin Bldg. at 222 W. Adams Street, Chicago.

Check Passer, Active in Textile Trade, Sentenced

Mrs. Deborah Bradley was sentenced to an indefinite term in the penitentiary by Judge Max Levine in General Sessions, New York, Thursday of last week, on a charge of passing worthless checks.

Mrs. Bradley was arrested in February on a warrant sworn out by Bragdon, Lord & Nagle Co., New York, publishers of TEXTILE WORLD. She had been particularly active in the textile trade in New York and Philadelphia.

THE TEXTILE WORLD Quiz

ANSWERS

(Questions on page 67)

No. 1—Such fabrics as muslin, long cloth, nainsook, flannel, handkerchief linen, plain madras, gingham, cotton foulards, chintz, percale, lingerie crepe, galatea, Swiss organdie.

No. 2—Such fabrics as voiles, eiderdown, silk warp flannel, Scotch flannel dress linens, silk and wool shirtings, fancy woven madras, velvet woolens, dimity, lawn and organdie.

No. 3—Causes the wool fibers to draw closely together thus giving the fabric more body and producing a certain degree of shrinkage.

No. 4—Plain-woven or twilled woolen or worsted, soft fabrics finished but not napped.

No. 5—Dissolve a stick of caustic of potash in a cup of boiling water; dip in the solution a corner of the fabric. If all wool it will entirely disappear but if cotton or cotton-mixed, skeleton threads will remain.

No. 6—From the town of Cambria, France, where the fabric was first made of linen.

No. 7—Made of the wool or hair of the alpaca goat, native of South America and found in the Andes, usually has cotton warp and alpaca filling.

No. 8—The name given to the number of ends to the square inch of finished fabrics.

No. 9—A commercial name for allowance for waste, dust or dirt found as a rule in bulk goods.

No. 10—A soft, bulky twilled woolen with the warp hidden by the filling, finished with tufts or curls.

Pocasset Worsted Company, Inc.

Worsted Yarns

Office and Mills — Thornton, R. I.

WORSTED YARNS — GRAY AND FANCY SHADES — BRADFORD — STEEL — SYSTEM — TWISTS AND MIXTURES — WEAVING-KNITTING

WARNER J. STEEL

Successor to EDWARD T. STEEL & CO.

Mills and Office — BRISTOL, PA.

WORSTED AND MERINO FRENCH SPUN YARNS FOR KNITTING AND WEAVING

Manufactured by

JULES DESURMONT WORSTED CO.

WOONSOCKET, R.I.

Philadelphia and Southern States—Thomas H. Ball, 1015 Chestnut St., Philadelphia, Pa.
New York—Charles Heyer, 1 Madison Ave.
Boston and New England States—Messrs. H. W. Dwight and Walter Skerry, 10 High St., Boston.
Los Angeles, Calif.—Harvey J. Mastellet.

Centredale Worsted Mills
Centerdale
R. I.

WORSTED YARNS

BECK RAYON CO.

FAST COLORS

FAST AND RELIABLE SERVICE

RAYON for KNITTING and WEAVING

200 Greene St., New York

RAYON TOPS·NOILS PICARDED

Spunrayarn and Rayon-Worsted Blends

ABEECO MILL, INC., 505-5TH AVE., NEW YORK CITY

CANADIAN REPRESENTATIVES: WM. B. STEWART & SONS, LTD., TORONTO-MONTREAL

DUPLAN
SILK CORPORATION
COMMISSION DEPARTMENT

Have

DUPLAN

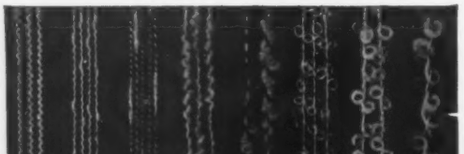
SIZE Your

RAYON

New York Office
135 MADISON AVE.

Southern Office
JOHNSTON BUILDING, CHARLOTTE, N. C.

Mills at
HAZLETON—DORRANCETON—NANTICOKE, PA.



TOULSON YARNS, INC.
Bridgeport, Conn.

Novelty Yarns
of Every Description

Worcester Bleach & Dye Works Co.
ESTABLISHED 1861 WORCESTER, MASS.

BLEACHERS, DYERS AND MERCERIZERS OF COTTON YARNS AND WARPS

Winding on Cops, Tubes or Cones
Manufacturers of Cotton Yarns in Fast Colors—Also Glazed Yarns
"Sewing and Stitching Threads for All Industries"
RAYON DYEING AND WINDING

Conditioning of Crepes

Following requests of its customers and after considerable research, the United States Testing Co. announces it will rewind the two pound sample used in the conditioned weight test. Full details on request.

UNITED STATES TESTING CO., INC.
316 Hudson St., New York

BRANCHES: 207 Chestnut St., Philadelphia; 220 Ellison St., Paterson; 63 Union St., New Bedford; 421 So. Wells St., Chicago; 10-A Hongkong Road, Shanghai, China.

Plant at Hoboken, N. J.

Line at Side Actual Size

AT LAST A Real Moth Destroyer and Preventative

EDGAR A. MURRAY'S MOTH DOOM sprayed directly on Wool, Yarns, Finished Cloth, Rugs, etc., not only destroys all worms and larvae, but leaves a preventative against future attack.
Will not stain the finest fabric.
Guaranteed ABSOLUTELY.

NO RIDDANCE — NO PAY

For full particulars apply to

HAINSWORTH SUPPLY COMPANY
2411 N. 6th St., Phila., Pa.

ROACH DOOM RAT DOOM

RAYON AND SILK YARNS

Rayon Producers Well Booked Up

Little Surplus Available for Demands of Customers Until August

The rayon market continues in a confident and well sold up position. Producers for the most part are booked up solid or have only nominal quantities for sale until Aug. 1. Orders now on hand will take care of the major part of the output until then. The price situation is very firm, but less is being heard at the present of the further advances that were talked of so freely a few weeks ago. One difficulty in the way of further advances is that fairly good quantities are held in second hands for resale. While these quantities are not all the top quality, they act as a sort of safety valve in restraining the enthusiasm of sellers who might desire still higher levels.

A number of jobbers commented last week on a reduced demand from the cotton mills which may be temporary or which possibly may reflect a situation that is peculiar to their own business. They state that the biggest part of the rush from the cotton mills is over as far as they are concerned. Mills have gotten out the goods against their spring and summer orders and now will be getting ready for fall business. Sampling should commence soon and by July, August business is expected to be well under way. This is of course their view of it and may view only one side. The chances are that the larger mills are not placing their orders for large quantities of high grade yarns with them but with the producers.

Deliveries to hosiery and knitwear mills continue very large but it would be only natural that with large orders to take in, new business should be slower in coming in just now. Deliveries to silk mills are understood to be expanding again particularly with the velvet and cut pile manufactures.

Visit Bemberg Plant

German Officials Here—Viscose Unit Rumored

JOHNSON CITY, TENN.—Three prominent rayon manufacturers of Europe headed a party of officials and stockholders who visited the American Bemberg Plant here, arriving Tuesday.

The German industrial leaders mentioned were Dr. F. Bluethgen, chairman of the board of the Vereinigte Glanzstoff-Fabriken, Elberfeld; Dr. W. Springorum, another director and Dr. C. Benrath, chairman of the board of I. P. Bemberg, Ltd., Barmen, Germany and a member of the board of the Glanzstoff company which is closely allied with Bemberg. With these officials were H. W. Springorum, Jr., who has been in America for some weeks; Herbert Lehmann of Lehmann Bros., bankers, Barmen, Germany; Alfred Schoenlicht, banker and one of the founders of the American Bemberg Corp.; Ludolph Rosenheim, banker of Berlin, who is one of the chief owners of the holding company controlling a large tract of land in the Watauga Valley between Johnson City and Elizabethton; Jack Strauss, vice-president of Wolf, Strauss & Co., of New York and of the American Bemberg Corp.; Myron S. Faulk of New York, vice-president of the American Bemberg Corp.; Dr. Stoeckley of the patent office research, Elberfeld, Germany; Henry Ruhlender, banker of New York; Theodore Heebler, banker of New York, and one of the large stockholders of the American Bemberg Company; and Herr von Eichler, secretary to Dr. Bluethgen.

The purpose of the visit here was to show the officials the completed first unit of the plant of the American Bemberg Corp. in Happy Valley near Elizabethton, a few miles out of Johnson City. A meeting of the stockholders was held and it was understood that the matter of the early construction of the second and third units of the plant was under discussion.

It is also believed here that the announcement of a viscose plant in this region may be made in the near future. A few days ago the American Glanzstoff Corp., capitalized at $7,000,000, was chartered in Delaware and it is reported that the incorporators were from this same group of industrial leaders. Several Middle Appalachian sites are rumored under consideration. The establishment of such a plant in this country would be of particular interest since the Vereinigte Glanzstoff-Fabriken, understood to be behind the new corporation, is the largest rayon company in Germany.

Raw Silk Consumption Continues

THE Silk Association figures for the month of April indicate a continuance of a high rate of operations in broad silk and hosiery mills. Mill takings during the month amounted to 47,800 bales which is only slightly below the peak for all time registered in March, when 49,200 bales were taken. The maintenance of such a high rate of operations during March and April, when ordinarily mills would begin to curtail, can be explained only by the low level of the raw market up till recently which has encouraged manufacturers to continue making up goods. It would be only natural to look for a lower figure next month, particularly if the market holds near the present basis.

Imports during April took a sharp rise to 46,400 bales which did not prevent, however, warehoused stocks in New York from showing another decline. On May 1 stocks in warehouse amounted to only 31,700 bales which at the current rate of operations is only slightly more than two weeks' supply. It is likely that a number of larger manufacturers are holding in reserve quantities of tested high grade silks, but this does not ease the situation for the average firm which has been and is buying from hand to mouth.

In the small stock figure in the face of an increase in imports of Japan silks, can be seen the explanation of the recent rise in the Japan market, and the scarcity and high prices asked for high grade lots for spot or nearby delivery. Taking a broad view of the entire price question, one is justified in making the statement that for the last four or five months raw silk prices were allowed to sink too low. That they should have done so is understandable in view of the regrettable crisis that has developed in Japan. It does not alter the fact, however, and manufacturers here are in a measure now paying for the error.

DOMESTIC RAYON PRICES

Denier	"A"	"B"	"C"
55	$2.45	$2.30	$2.20
65	2.35	2.15	2.05
75	2.50–2.55	2.30–2.35	2.20
80*	2.60	....	....
85	2.15	2.00	1.90
90	2.30	2.15	2.05
100	2.15	2.00	1.90
100*	2.25	....	....
120	1.75	1.65	1.55
125	1.75	1.65	..
130	1.65	1.55	1.45
140	1.55	1.45	1.35
150	1.50	1.45	1.35
150*	1.75	....	....
170	1.45	1.40	1.25
170*	1.70	....	..
200	1.45	1.40	1.25
200*	1.70	....	....
250	1.35	1.30	1.25
300	1.30	1.25	1.20
450	1.20–1.25	1.20	....
600	1.15–1.25	1.20	....
750	1.15	....	....
900	1.15–1.20	....	....

* Multi-filament.

CELANESE

Denier		Denier	
45	$4.25	170	$2.85
75	3.75	200	2.75
100	3.65	300	2.70
150	2.90		

BEMBERG (Cuprammonium)

Denier	Filaments	Price
40	30	$4.25
60	45	3.65
80	60	3.50
100	75	3.25
120-A	90	2.90
120-B	90	2.35
150-A	112	2.50
150-B	112	2.15
180	135	2.30
240	180	2.25
300	225	2.25

CELANESE CORP. OF AMERICA

The American Cellulose & Chemical Mfg. Co., Ltd., has changed its corporate name to the Celanese Corp. of America, effective last Saturday.

As this company manufactures Celanese yarns and fabrics, the new name is regarded as much more descriptive and appropriate than the old one.

Rayon and Flax

The possibilty of developing a new fabric—a combination of artificial silk and flax—has for some time been engaging the attention of the linen industry in the north of Ireland. The investigations have now passed beyond the experimental stage, and several firms are turning out considerable quantities of artistic material such as tapestry and brocades for upholstery, decorative centers for tables, and dress material, reports the Belfast correspondent of the London *Financial Times*.

Large Increase in Rayon Imports Into India

The following table shows the imports of rayon yarns and piece goods into India during the nine months' period from April to December in the last two years:

	Rayon, April–December 1925		1926	
	Lbs.	Rs.	Lbs.	Rs.
Yarn:	1,826,000	5,451,000	3,167,000	5,754,000
U. Kingdom	616,000	1,959,000	331,000	885,000
Italy	775,000	2,172,000	2,031,000	3,295,000
	Yds.	Rs.	Yds.	Rs.
Piece Goods	9,075,000	8,333,000	29,543,000	21,602,000
U. Kingdom	3,833,000	3,537,000	11,502,000	8,131,000
Italy	3,101,000	2,895,000	9,898,000	5,738,000
Switzerland	1,153,000	1,320,000	4,172,000	3,802,000

To List Rayon Separately in Freight Classification

Listing of rayon as a separate item, independent of the silk items in the freight classification has been approved by the Southern Classification Committee, and is announced for its forthcoming publication, according to advice received by the Traffic Bureau of the Silk Association of America, Inc.

All reference to artificial silk will, by this amendment, be eliminated from

Standard of the World

For tests of strength, elasticity, etc., of all textiles and other materials

SCOTT TESTERS

Built in many models and sizes from one quarter ounce minimum to one ton maximum capacity.

Manufactured by HENRY L. SCOTT CO., Providence, R. I.

Represented in New York and Philadelphia by UNITED STATES TESTING CO., Inc.

See also CONSOLIDATED TEXTILE CATALOG

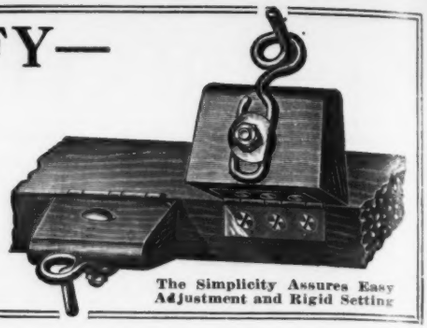
Direct Southern Rep. ALDRICH MACHINE WORKS Greenwood, S. C.

—SPECIFY—

The Palmer Improved Adjustable Thread Guides

on your Spinning and Twisting Frames.

The I. E. Palmer Co.
Middletown, Conn.



The Simplicity Assures Easy Adjustment and Rigid Setting

Mill and Machine Brushes

Brushes for { COTTON, WOOLEN and SILK MILLS

MASON BRUSH WORKS

Brushes Repaired

See also CONSOLIDATED TEXTILE CATALOG

WORCESTER, MASS.

WENTWORTH
Double Duty Travelers

Last Longer, Make Stronger Yarn, Run Clear. Preserve the SPINNING RING. The greatest improvement entering the Spinning room since the advent of the HIGH SPEED SPINDLE.

Manufactured only by the

National Ring Traveler Co.

Providence, R. I.

31 W. 1st St., Charlotte, N. C.

FRANKLIN MACHINE COMPANY

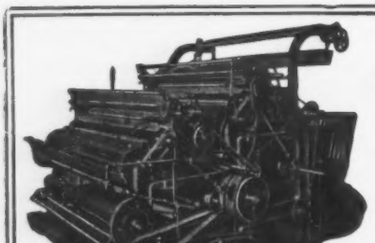
ENGINEERS -:- FOUNDERS -:- MACHINISTS

PROVIDENCE, R. I.

Manufacturers of Transmission Machinery, Spun Silk Machinery, French Worsted Drawing Frames (Frotteurs), Ball Winding Machines, Shoe Lace Tipping Machines, Yarn Dressers, Wool Top Baling Presses, Yarn Baling Presses, Special Textile Machinery, Corliss Steam Engines, Worm Gears and Worm Gear Reduction Units.

TEXTILE PRINTING MACHINERY

Machinery for Dyeing Rayon in the Skein



CLOTH ROOM and FINISHING MACHINERY

Consult us on your shearing problems. Backed by seventy-five years of experience in this line.

Curtis & Marble Mach. Co.
72 Cambridge St., Worcester, Mass.

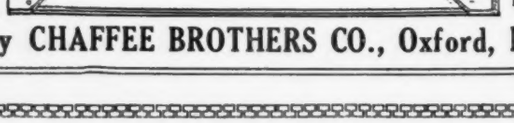
See also CONSOLIDATED TEXTILE CATALOG

Twenty Years Manufacturing Cloth Boards

THE CHAFFEE PATENT CLOTH BOARD

They Save Their Cost in Freight *Clean, LIGHT and Strong*

Made of Paper and wood
Need no covers
Will not Split or Warp; not liable to break



BOX SHOOKS and CLOTH BOARDS

M'f'd by CHAFFEE BROTHERS CO., Oxford, Mass.

BARBER-COLMAN COMPANY

General Offices and Plant

Rockford, Ill., U.S.A.

Framingham, Mass.
Greenville, S.C.

Knotters
Warp Tying Machines
Warp Drawing Machines
Automatic Spoolers
High Speed Warpers

WALBUCK MILL CRAYONS

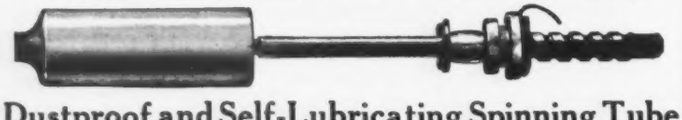
20 Colors—Always Uniform

for wool, worsted, cotton and rayon yarns and piece goods

Easily Washed Out

WALBUCK CRAYON CO. 638-640 Haverhill St., LAWRENCE, MASS.

Important Improvement in Worsted Spinning



Dustproof and Self-Lubricating Spinning Tube

saves oil, prevents clogging with dust and lint, thereby insuring longer life to the tubes, saves labor, maintains uniform speed, *and most important of all,* makes PERFECT YARN.

JAMES H. SMITH CO. - - *Providence, R. I.*

Successors to BAMFORD & SMITH CO.

STEEL CAPS, SPINDLES, TUBES AND FLYERS—Manufactured and Repaired.

Boiler Flues, Shafts, Pulleys, Hangers, Belting, Packing, Lacing, Pumps, Injectors.

BOILERS

Tank and Stack, Pipe, Mill Supplies. For Mills and Public Works. Low Prices.

Cotton, Oil, Gin, Saw, Grist, Fertilizer, Mill Machinery, Supplies & Repairs & Castings

LOMBARD FOUNDRY, MACHINE, BOILER WORKS AND MILL SUPPLY STORE, AUGUSTA, GA.

Capacity 200 hands Three Hundred Thousand Feet Floor Space

Rayon and Silk Yarns—Continued

the classification. Shippers will hereafter find rayon entries under "R," instead of a sub-item of silk as is now the case.

Request that rayon be given an independent heading, without reference to silk or artificial silk was made some months ago by a representative of the Traffic Bureau who appeared before the Freight Classification Committee urging this step.

Spun Silk Unchanged

Buying Is Smaller and Close to Actual Requirements

The spun silk market pursued its desultory course last week, getting nowhere in particular and thereby disappointing those who had looked for more confident buying on the strength of an admittedly firm situation. Prices were unchanged and firm, but no advances were reported and indeed it will take heavier buying to permit the matter to be considered at all. Shipments of single yarns are fairly large with a fair proportion of two-ply yarns used likewise. Mills, however, refuse to place any future business to speak of. Prices are as follows:

(2%—30 days)

60—2	$5.40	40—2	$5.05
50—2	5.25	62—1	4.30

Thrown Silk Quiet

Buying Restricted by Advance—Canton Crepes Cheaply

The thrown silk market was quieter last week with business restricted by the higher prices now in force. Thrown silk dealers, except where in a few instances low priced raw silk is owned, have had to adjust their quotations to the much higher raw silk market. Not only this, but they have their difficulties in getting good silk at all so that they have had no alternative but to raise their prices decidedly. Manufacturers do not seem to have the confidence in present levels to do more than buy a few weeks at a time which has had the effect of sharply curtailing buying.

Crepes in the three and four thread constructions particularly the higher grades were bought moderately, for May delivery. To secure this business, however, sellers had to shade quotations for competition was keen. Following a lull of several weeks' duration some business of good volume was reported in Canton crepe. Prices heard were around $5.25 to $5.30 which of course is out of the question for any house that does not own low priced Canton raw.

(60 days basis)

Japan Organzine 2 thd Grand XX in skeins	$7.50
Japan Tram 3 & 4 thd in skeins	6.25
Japan Tram 5 thd on cones	6.20
Japan Crepe 3 thd X on bobbins	6.85
Japan Crepe 3 thd Crack XX on bobbins	7.40
Japan Crepe 4 thd X on bobbins	6.70
Japan Crepe 4 thd Crack XX	7.20
Canton Crepe 3 thd N S 14/16 on bobbins	5.40
Tussah Tram 2 end on cops	3.65

Raw Silk Quieter

Trend Is Toward Slightly Lower Levels, Though Spots Scarce

A somewhat easier trend developed in the local raw silk market due not so much to increased offerings as to a reduced demand. Mills bought only what they absolutely had to have and were not interested in placing orders for anything later than May delivery. They find no incentive to operate ahead with fabric prices what they are, and the prospect that more normal conditions as to the supply of high grades will ease the short supply. Yellow silk in the 20/22 size and also 24/26 continues almost non-existent locally with prices prohibitive for such small quantities as are available for resale.

A number of firms were still searching the market for Grand XX 13/15 white silk which is very difficult to locate and commands full prices. In referring to Grand XX we mean a real Grand which passes in present market parlance for a Super Selected or a premium Grand or whatever the seller wishes to call it. Cantons were slightly easier due again to the inability of mills to pay the full advances. Prices are as follows:

(90 days basis)

Japan Filature, Grand XX	13/15	$6 50
Japan Filature, Crack XX	13/15	6 20
Japan Filature, Double X	13/15	6 00
Japan Filature, Best X	13/15	5 90
Japan Filature, X	13/15	5 70
Japan Filature, Best No. 1/X	13/15	5 65
Canton Filature, New Style	14/16	4 35
Canton Filature, New Style	20/22	4 10
Tussah Filature, 8 cocoon		2 10

SUMMARY OF SILK CABLES

Saiyu Yokohama	1460 Yen
Exchange at 3 m/s	48½
Cost C.I.F. New York	$5.63
Stocks Yokohama Apr. 30	34,000 bales

Conditions in Yokohama turned quieter last week and the market showed some slight weakness. The buying noted from April 25 through April 28 apparently satisfied exporters' more urgent needs, and subsequently only small transactions for export were noted. On May 4 prices were generally quoted down 20 Yen on the basis of 1460 Yen which resulted in sales of 500 bales and signs of more interest. Exchange following its hectic movements of the week previous held steady at 48½ for 3 ms. The Bourse remains entirely closed and will probably stay closed until the ending of the moratorium. An interesting situation presents itself here with regard to the status of contracts for April which should have been settled several days ago.

Manufacturers of
HOSIERY TRAM

Artificial Silk on Cones

Artificial Silk twisted with Raw Silk

Artificial Silk twisted with Worsted

VAN STRAATEN AND HAVEY, Inc.

Artificial Silk twisted with Cotton

Mercerized Cotton twisted with Raw Silk

Sample Cones sent on Request

137 Berkley St., Wayne Junction
PHILADELPHIA

New York Office: 389 Fifth Ave.
A. Rosenstrauch, Representative
Boston Representatives:
Perkins & Boland, Inc., 80 Federal St., Boston
Pennsylvania and Southern Representative:
John S. Bowes, 137 Berkley St., Philadelphia

Dyed & Natural

Raw & Thrown

RAYON

Cops—Cones—Spools

Prompt—Efficient—Reliable

BERGER RA'YARN CO.

57 East 11th Street
New York

Stuyvesant
2375
2376

LA SOIE DE CHATILLON

Soc. An. Italiana—Capital 200,000,000 Lires—Milan, Italy

RAYON (Viscose)

Daily Output 50,000 lbs.

"SERIS"
Artificial Schappe

"CHATILAINE"
Artificial Wool

Artificial Straw

Artificial Horsehair

Sole Selling Agents and Distributors U. S. A.

59 Pearl St.
New York

ASIAM INC. Whitehall 8572-8389

"Wear American-Made Fabrics"

Mr. I. Kno-Wool says:

"It is said that the cover-charges at the night-clubs cover the uncover charges of the performers."

Nothing to be concealed about B. & G. Better Grade Reworked Wools. We produce quality stocks at moderate prices. How about your next requirements?

Send for Samples

THE BASCH & GREENFIELD CO.

REWORKED B&G WOOLS

Home Office and Mills
Newark, N. J.

Established
1872

WOOL CARBONIZING
Sulphuric Acid and Chloride of Aluminum Processes
Also Wool, Noils and Waste
Sorted, Scoured and Carbonized
GILET CARBONIZING CO., INC.
James Gilet, Pres., Treas. and Mgr.
LOWELL, MASS.
Experience of 30 Years in Verviers (Belgium) and in the U. S. A. At your service

EAVENSON & LEVERING CO.
Scouring AND Carbonizing of WOOL AND NOILS
Depainting of Wool and Noils a Special Feature of our Business
Philadelphia and Reading Railway Sidings
CAMDEN, NEW JERSEY

ALL STEEL
ECONOMY
FIRE PROOF
BALING PRESSES
ALL SIZES FOR ALL PURPOSES
LARGEST LINE BUILT IN U.S.A.
ECONOMY BALER CO. DEPT. J. ANN ARBOR, MICH. U.S.A.

Carbonizers and Neutralizers
of
Scoured Wools and Noils
by the
Dry Gas Process
Produces a wool and noil of attractive feel, uniform color, less shrinkage and greater fibre value.

GORDON and GORDON
P. O. Box 41 Hazardville, Conn.

Card Stamping and Repeating
FOR ALL TEXTILE FABRICS
Repeating for Throw Overs for Fine and French Index
Walter W. Hodgson, Inc.
S. W. cor. Lawrence and Clearfield Sts
PHILADELPHIA

Swift's WOOLS
Boston Philadelphia
Chicago

STEEL
for Immediate Shipment from Stock

Bars	Boiler fittings
Shapes	Steel for Concrete
Structurals	Reinforcing
Rails	Tool Steel
Plates	Alloy Steel
Sheets	Floor Plates
Rivets	Safety Treads
Bolts	Babbit Metal
Nails	Small Tools
Tubes	Machine Tools

Write for the Ryerson Journal and Stock List, the "Key" to Immediate Steel.

JOSEPH T. RYERSON & SON INC.
CHICAGO ST. LOUIS CINCINNATI DETROIT BUFFALO NEW YORK

New Jersey Textile Wire Stitcher
Highest Grade
Machine for rapid and Economical Method of Attaching Rider tickets to Hosiery or other Garments.
Uses pointed staples, cannot tear the finest fabric
Send for Catalogue
J. L. Shoemaker & Co., 15 S. Sixth Street PHILADELPHIA

FRANKEL BROS. & CO.
42-48 Commercial St., Rochester, N. Y.
OUR SPECIALTY: We grade new woolen clippings ready for the picker. Write for samples and prices. Correspondence solicited.

GORDON BROTHERS, INC.
HAZARDVILLE, CONN.
Reworked Wool, Wool Waste
Custom Carbonizing by Dry Process

M. SALTER & SONS
Graders of
WOOLEN RAGS
Manufacturers of
REWORKED WOOL
CHELSEA, MASS.

MACUNGIE SILK COMPANY
Macungie, Pa.
For binding Cotton and Woolen Bed Blankets
Binding and Ribbon
Go-Cart Covers, Kimonas, Bath Robes, etc. Special Colors or Shades made to order.

Elliot Cloth Folder and Measurer
FOR PRINT WORKS GINGHAM AND COTTON MILLS, BLEACHERIES, ETC., ETC.
Send for Circular
Manufactured by
ELLIOT & HALL, 54½ Hermon St. Worcester, Mass.

TEXTILE MACHINERY MILL SUPPLIES
EGYPTIAN COTTON
Atkinson, Haserick & Company
BOSTON, MASS., BRADFORD, ENG.
Philadelphia-Commercial Trust Bldg.

WOOL

Slow Movement in Fibers and Waste

Orders in Small Amounts Placed at Low Prices—White Mill Wastes in Fair Call

No material improvement is noticeable in the reclaimed wool situation. Its prospects are in the future and based upon the certainty that sometime or other larger business will go to woolen mills and other users of recovered materials. Conditions at the moment are quite unsatisfactory. Mills will not place any orders ahead. Reclaimed wool men on their part will not buy any rags ahead even though at the present time a number of the desirable grades are at distress prices.

Prices in the woolen rag market are far from stabilized and the trend is toward even lower prices. The price cutting indulged in by a number of the small graders who in their anxiety to get the little business available and with their very general ignorance as to actual costs of doing business is placing even the very best rags on the bargain counter. Some good rags like hoods and merinos are low enough to permit of speculative purchasing of the same and putting into stock until times take a turn.

The downward tendency in the old rag market has not yet been checked. Much irregularity is seen and wide price quotations on the same material. Rough cloth is firmer than mixed softs and worsted graded materials seem stronger than the soft rags. Clips are fairly firm. There is a steady call for fine blue worsteds at 40-41c. Some sales are made of mixed clips at 15-16c and of fine light clips at 28-29c. Blue serge clips in the Dewsbury market are very low-priced being quoted there around 13c with the old rag at 5½c. Blue worsted clips on the other hand are quite high, quoted 32c with old blue worsted 13c.

Wool wastes are being taken very slowly. Mill demand still continues on the fine quality. Some threads also garnets and garnetted underwear and hosiery clips are being taken also a little drawing lap and some fine worsted card waste. Colored stuffs are still inert and on the balance accumulating with prices easy. No great interest is being shown in wool wastes in the Bradford district. Output of good worsted materials is slow. Apart from threads no demand of consequence appears from America. The following table compares some standard wastes in the two markets, duty and freight included in the foreign:

	Boston	Bradford
Fine lap	$1.12	$1.19
Fine colored lap	.85	1.01
Fine threads	.77	.76
¼ blood threads	.50	.54
Fine colored threads	.36	.54

New England Mills Use More Wool

Show a Gain of 21% for March—General U. S. Consumption for January-March 18% Larger Than a Year Ago

BOSTON.

IT is encouraging to note that wool consumption is on the gain. The utilization of virgin wool for clothing purposes during the first quarter of 1927 showed an increase of 18.3% over the first quarter of 1926 while carpet wool consumption showed a gain of 10.8%.

The advance in general consumption in March as compared with February was quite substantial, totaling 8,324,000 pounds or 18.1%. The greatest increase was shown in medium wool and the least in fine wool. Machine activity for the month was featured by a decrease in comb and worsted spindle activity and by an increase in card and woolen spindles indicating rather clearly that the woolen branch for the month gained relatively on worsteds.

Wool consumption in New England during March made a rather notable gain, the mills utilizing about 1,000,000 pounds a week more for the month than in February. The situation is shown in the following table:

	GREASE	SCOURED	PULLED
March	19,996,000	2,807,000	1,373,000
February	16,080,000	2,408,000	1,255,000
Increase	3,916,000	399,000	118,000

On a grease basis New England consumption in February was 22,572,000 pounds and in March 27,422,000 pounds, a gain of 4,870,000 pounds.

New England consumption in March was larger actually and relatively being 51% of total as compared with 49.3% in February and 46.7% in January. The following table compares the beginning and the ending of the first quarter of 1927:

	March	January
Total grease consumption	54,262,000	46,389,000
New England per cent	51.0%	46.7%
Percentage of domestic	47.4%	48.2%

Total U. S. consumption for concerns reporting showed that on a percentage basis, grease and scoured wools were running neck to neck. The situation is indicated herewith:

	March	February	Increase
Grease	38,442,000	32,108,000	19.8%
Scoured	5,761,000	4,846,000	18.9%
Pulled	3,223,000	3,102,000	3.9%

An examination of consumption grade by grade brings out the fact that the utilization of ⅜s blood wool showed a very marked increase amounting to 28.1%, while the increase in fine wool consumption was only 7.4%. The following table gives U. S. consumption of the several clothing grades for the two months:

	March	February	Increase
Fine	11,894,000	11,070,000	7.4%
½ blood	5,259,000	4,380,000	20.6%
⅜s blood	6,980,000	5,448,000	28.1%
¼ blood	6,465,000	5,192,000	24.5%
Below ¼ blood	3,888,000	3,380,000	13.1%

A very general increase in wool consumption for the first three months of this year seems difficult to reconcile with disturbed conditions in the yarn and top industries and complaint of poor business in wool circles. This increase in consumption coincides with a decline of 40,000,000 pounds import into this city. Declining imports and increasing consumption usually point in the direction of higher wool values. The following is the showing for concerns reporting consumption, grease basis, for the first quarters of 1926 and 1927:

	Jan.-Mar. 1927	Jan.-Mar. 1926	Increase
Comb'g & clothing	111,151,000	93,885,000	17,266,000
Carpet	35,438,000	31,985,000	3,453,000
Totals	146,589,000	125,870,000	20,716,000

Wool and Substitute Quotations

(Corrected at close of business on Wednesday)

WOOL

Ohio, Pennsylvania and West Virginia

Fine delaine	.44—.45
Fine clothing	.38—.39
½ blood	.44—.45
⅜ blood	.43—.44
¼ blood	.42—.43

California (Scoured Basis)

Northern, 12 mo.	1.03—1.05
Southern, 12 mo.	.87— .90

Texas (Scoured Basis)

Fine 12 mo.	1.05—1.08
Fine 8 mo.	.90— .95

Pulled—Eastern (Scoured Basis)

A.A.	1.05—1.08
A-Super	.90— .93
B-Super	.83— .85
C-Super	.70— .73

Montana, Idaho and Wyoming (Scoured Basis)

Staple fine	1.08—1.10
Do. ½ bld.	1.00—1.02
Fine & fine medium	1.03—1.05
⅜ blood	.88— .90
¼ blood	.78— .80

Mohair—Domestic

Best combing	.75—.80
Best carding	.65—.70

Mohair—Foreign (In Bond)

Turkey Fair av.	.43—.44
Cape Firsts	.43—.45

Foreign Clothing and Combing (In Bond)

Scoured Basis—Cape:	
Super 12 months	.95—1.00
Super 10-12 months	.98— .92
Australian:	
70s	1.07—1.10
64s	.95— .98
58—60s	.83— .88
Grease Basis:	
Montevideo:	
58—60s	.41—.42
56s	.39—.40
50s	.35—.36
Buenos Aires:	
48, 40—44s	.28—.29
5s, 36—40s	.26—.27

Foreign Carpet (Grease Basis in Bond)

China: Combing	.29—.30
Szechuen ass't	.26—.27
Cordova	.25—.26
Scotch Black Face	.23—.24
East India: Kandahar	.36—.38
Vican'r	.40—.44
Joria	.45—.50
Aleppo	.37—.39

SUBSTITUTES

Wool Waste

Lap—	
Fine White	1.10—1.12
Fine colored	.85— .88
Thread White Worsted—	
Fine	.75— .78
½ blood	.70— .73
⅜ blood	.65— .68
¼ blood	.50— .55
Thread Colored Worsted—	
Fine	.35— .37
½ blood	.33— .35
⅜ blood	.30— .33
¼ blood	.28— .30
Card—	
Fine white	.43— .48
Medium white	.30— .33

Old Woolen Rags

Merinos—	
Coarse light	7 — 7½
Fine light	15 —16
Fine dark	5 — 5½
Serges—	
Blue	7 — 8
Black	5 — 6
Red	14 —14½
Knit—	
White	37 — 39
Red	14½— 15
Light hoods	16 — 17
Worsteds—	
Light	8 — 8½
Blue	7½— 8
Black	7 — 7½

London Sales Open Lower

Prices Below Peak of Year but Above Closings in 1926

BOSTON. The third series of wool sales opened in London Tuesday, a miscellaneous collection being offered and considerable wool being withdrawn. There was a fair attendance but competition was very slack. The best merinos were unchanged as compared with previous closing while inferior merinos were off 5%. The crossbred qualities sold were on the average one penny per pound lower than prices on similar sorts made at the close of the second series. It seems quite evident that the peak has been reached in wool prices for the time being and that the holders of Colonial and South American wools in Bradford and London have sufficient wool on their hands to take care of and with the additonal problem of merchandising of materials they bought at higher prices.

The lower opening in London so far as it can be judged from early operations still leaves the wool level slightly higher than the first series of the year in January. The second series registered further advances at the opening but closed easier. The opening at the third series was generally below closing prices of the second series. The London market has therefore lost only part of the gain made when in January values advanced from par to 5% for all sorts as compared with the closing series in December 1926. The following table compares prices on similar wools at the January and May openings respectively:

	First Series	Third Series
Super 64s	$1.02	$1.04
Average 64s	.98	1.00
56s	.72	.74
46s	.44½	.46

The above prices are clean basis c. i. f. Boston in bond.

The situation on Summer Street is

An Accurate and Sensitive Balance For Textile Use

Style No. 5020

Working parts and graduated beam enclosed in glass metal case.

For further particulars mention Style No. 5020.

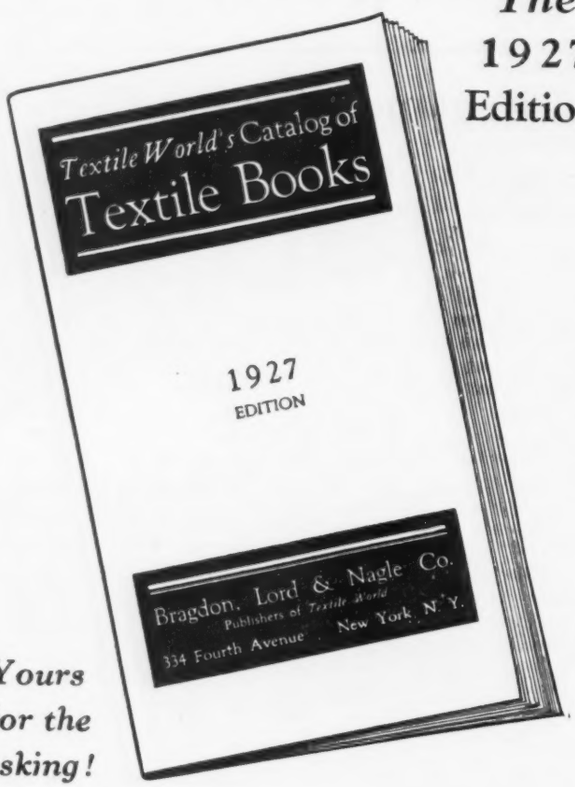
Torsion Balances used by National, State and Municipal Governments. United States Appraisers Stores, Manufacturers and the trade. *Write for Textile Pamphlet.*

The Torsion Balance Company

Factory, Jersey City, N. J.
Office, 92 Reade Street, New York

Branches: Chicago and San Francisco

The 1927 Edition



Yours for the asking!

Repairing on the Spot

There's no need of removing any equipment to the repair department — the ***Champion Section Hand Bench*** makes possible all repairs and adjustments on the spot! This work bench on wheels keeps tools and work together—speeds up loom-fixers and mechanical men. Brake (controlled by handle) holds bench immovable. Equipped with vise, shelf and drawer with lock. Rigidly constructed throughout. Price and specifications on request.

Write for our catalog.

The Western Tool and Mfg. Co.
Springfield, Ohio

ARCTIC

ICE MAKING AND REFRIGERATING EQUIPMENT

It is paying the mill man from the standpoint of Economy and Convenience—to install an Arctic plant and furnish the entire mill village with ice.

An Arctic refrigerating plant will provide cold drinking water for the mill workers, and furnish refrigeration for your cafeteria. It will also cool your caustic solutions.

Arctic engineers are experienced in adapting mechanical refrigeration to your industrial problems. Without obligation they will gladly discuss your needs and suggest the most desirable layout.

Interesting literature will be mailed on request.

The Arctic Ice Machine Co.

See also CONSOLIDATED TEXTILE CATALOG

Canton, Ohio

JOHNSON FRICTION CLUTCHES

USED WIDELY ON SILK TENTERING MACHINES

Single Clutch with Pulley

Its compactness and great power combine to make the JOHNSON especially desirable for Silk Tentering Machines. H. W. Butterworth & Sons Co., Morrison Machine Co., and other leading builders are getting fine results with them.

JOHNSONS start promptly. Release instantly. No slipping. No grabbing. Widely used on textile machines of all kinds. Our illustrated clutch reprints give full information. Equip with JOHNSONS.

WRITE FOR VIOLET CATALOG

See also CONSOLIDATED TEXTILE CATALOG

Single Clutch Showing Working Parts

THE CARLYLE JOHNSON MACHINE CO. MANCHESTER, CONN.

FIRE BRICK FOR YOUR FURNACES

Have you ever investigated conditions in your Boiler Room? Do you accept Failures of Fire Brick in your Power Plant just as a necessary evil?

Do you know whether they last a month or a year?

Poor Fire Brick cost you a lot of money in shut downs, cost of repairs and lessened production. Why not use the Best and avoid these losses?

Our Service Department in charge of practical and technical Refractories Engineers will aid you solve your Fire Brick troubles.

Write or wire for booklets and descriptive matter

QUEENS RUN REFRACTORIES COMPANY, INC.

Boston Office: 141 Milk Stree
New York Office: 15 Park Row
Home Office: Lock Haven, Pa.

See also CONSOLIDATED TEXTILE CATALOG

ESTABLISHED 1836

MICHAEL & BIVENS
Contracting Electrical Engineers

Gastonia & Greensboro, N. C.

See also CONSOLIDATED TEXTILE CATALOG

Expert Motor and Transformer Rewinding. Supplies Stocked

For Vibrating Parts

NO more rattling parts—loosened by vibrations. This new nut clinches its bolt with an unfailing grip—and parts can't help but stay put. It's the locking wire that does the trick—simple but fool-proof!

Let this PERMA-TITE Self Locking Nut put an end to loosened parts on your machines. It screws on like an ordinary nut—but how it holds! Easily removed . . . can be used repeatedly. *Write for sample.*

INDUSTRIAL LOCK NUT CO.
South Hanover, Mass.

PERMA-TITE

The SELF-LOCKING NUT

For Sticking to Iron

Stop the Slip!

—by covering your pulleys with leather or cloth. Use Ament's Glue and you will need no rivets. Satisfaction guaranteed

H. B. AMENT GLUE CO.
Louisville, Ky.

AMENT'S GLUE

Wool—Continued

rather hazy. Woolen wools are doing a little better however, but the demand is chiefly for medium to low wools either white, gray or stained. New clip wools will being to arrive in bulk in June and July and manufacturing interests it is said are expecting lower prices on the staple. The goods market is still slow although it is generally believed both in Boston and in New York that considerable business in worsteds is slated to come in later. Said a trader on the street "When business is hard to get woolens generally carry it off for they can always make goods at a price, not being confined to the use of virgin wools."

General clearance of small lots of all sorts and conditions of domestic and foreign wool is going on in the wool district. The market has been greatly disappointed at the apathy of mill interests. Manufacturers cover only for their actual needs. They are not carrying any sizable wool stocks nor on the other hand are they making goods to stock. The entire situation is very fluid. Should the goods market take on any spurt, activity both in the manufacturing of fabrics and the purchasing of wool will develop rapidly.

Further acquisition of the domestic wool clip by Eastern buyers has come to a standstill, more of a deadlock perhaps, because purchasing would be done if growers were willing to accept 2-3c per grease pound lower than what they ask. The speculative spirit is not dead on Summer Street although the outlook is unusually obscure. In spite of the fact that from fleece to fabric the health, style and value wear of wool is 100% the industry is in a rather sickly condition. Business in the men's wear division in the New York goods market showed some improvement last week. Came rather as a surprise to the pessimists who are likely to receive further jolts in the near future. Some substantial re-orders were received on low-priced woolens and also on certain worsted fabrics that have taken the fancy of the trade.

Boston Wool Receipts

Receipts of domestic and foreign wools at Boston, also imports at Philadelphia and New York for the week ended Apr. 30, based upon data compiled by the Market News Service of Bureau of Agricultural Economics, Department of Agriculture, are as follows, in lbs.:

	Week Ended April 30	1927	1926
Domestic	3,222,000	29,320,000	28,100,000
Foreign	4,504,000	68,346,000	106,220,000
Total	7,726,000	97,666,000	134,320,000
IMPORTS AT PRINCIPAL PORTS			
Boston	4,504,000	68,346,000	105,220,000
Philadelphia ..	1,987,000	28,907,000	17,494,000
New York.....	654,000	22,971,000	27,011,000
Total	6,145,000	120,224,000	149,725,000

Champlain Silk Mills, Glens Falls, N. Y., are shut down temporarily. The Whitehall (N. Y.) mills of the company are maintaining full time weekly schedules.

New Fleece Wools Offered

Growers in Missouri, Indiana and Michigan Asking 32c to 33c

PHILADELPHIA.—There has been a freer movement in bright fleece wools to knitting yarn spinners in this section, prices in sales representing no material change from those of last week. One of the largest sales, calling for more than 60,000 lbs., was made at a clean cost to the buyer of between 69c and 70c for bright quarter blood. Fair sized quantities of three-eighths out of bright wools have been moved at 40c in the grease. Bright fleece wools are showing more resistance to a further decline than during recent weeks although these wools cannot yet be termed steady.

New fleece wools are being offered in several sections in the middle West where it is reported farmers are quoting 32c to 33c for flat lots in the bright fleece sections. Dealers have received offers of this character from growers in various sections of Missouri, Indiana and Michigan, being the first of the current season. New territory wools have been coming into this market in fair sized amounts during the last two weeks from the early shearing sections of the far West. Fleece dealers assert there is little difference between prices asked in middle West for bright wools, with freight and other charges added, than they are now securing for the old clips.

Direct Wool Buying

Dealers and commission houses here state the tendency of spinners and manufacturers to send their own representative to the middle West to buy fleece wools is gaining ground this season. They have found spinners in this section, more so than in past years, have placed their own men in the West, so that to this extent they will not come to local dealers for wool. One dealer was endeavoring to sell a large sized lot of fleece wools at the present market level and was confronted with much lower quotations this spinner had just received from growers in fleece sections.

Stocks of desirable pulled wools are small, the end of the season approaching. Dealers find white B supers are well cleaned up and as a result demand has shifted to less perfect Bs for which there has been a fair request this week. These "off" Bs have been selling at 80c, processed. The season has witnessed a good demand for white Bs and remaining lots of these are strongly held.

Prices of pulled have not changed white Bs being held at 85c, LBs at 87c with several dealers asking a cent higher; creamy Bs have moved well within a price range of 80c to 83c. Gray Bs have sold from 65c to 70c and stained around 78c. Noils are quoted at 53c to 55c for average quarter, 58c to 60c for three-eighths, 65c to 70c for half and 78c to 80c for fine, the later being slightly higher than a week ago. Carpet wools are quiet, East Indias being especially firm.

Anything made of wool can now have a new sales point—mothproofing with

LARVEX

. . . nationally known, nationally advertised

Larvex is the most effective mothproofing agent and the easiest to apply.

No extra handlings. No added equipment. Simply dissolve the proper quantity of Larvex in the last rinse water after dyeing and immerse the fabric in it for 20 minutes. You can use the same kettles in which the dyeing is done.

The cost of the Larvex treatment is extremely low. And a tag saying the product is mothproofed with Larvex will speed the sales of anything made of wool, whether it is mohair, blankets or carpets and rugs.

Send back the coupon right now and let us tell you how Larvex can work for you in your mill.

COUPON

T.W.-5-7-27

NEWPORT CHEMICAL WORKS, INC.,
Passaic, N. J.

Please send us full information on Larvex.

Name .....

Firm .....

Address .....

City .....State .....

All Around

EFFICIENCY

ECONOMY VICTROLYN REG. U.S. PAT. OFF. SIMPLICITY

SATISFACTION

Reasons Why

VICTROLYN

is used by the largest cotton mills in the country as a **sizing assistant** for Cotton Warps.

See also CONSOLIDATED TEXTILE CATALOG

BOSSON AND LANE, *Sole Manufacturers*
ATLANTIC, MASS.

GLAUBER'S SALT—

GENERAL CHEMICAL COMPANY

A PRODUCT of which the General Chemical Company's standard purity grade is recognized as most desirable. Stocked in quantity at several plants and more branch warehouses.

Address the nearest office.

GENERAL CHEMICAL COMPANY

40 RECTOR ST., NEW YORK

Cable Address, Lycurgus, N.Y.

BUFFALO · CHICAGO · CLEVELAND · DENVER · LOS ANGELES
PHILADELPHIA PITTSBURGH · PROVIDENCE · SAN FRANCISCO · ST LOUIS
THE NICHOLS CHEMICAL COMPANY, LIMITED, MONTREAL

FOR VALUE RECEIVED

The value of a dollar expended on mill supplies depends upon the care with which it is invested and the results obtained from what it purchases.

When you invest in the special purpose

Wyandotte Quality and Service **Textile Alkalies**

you obtain from their use a softer texture, brighter color, more even dyeing, and greater loftiness to your textile fabrics.

These results insure such a superior appearance and feel to textile products that hundreds of textile manufacturers are benefiting by the advantage they provide in a competitive market.

So confident are we of the truth of these facts and of the ability of these products to produce these results that we guarantee them to be and do all that is claimed for them or the trial costs nothing.

Ask your supply man for "WYANDOTTE"

The J. B. FORD CO., *Sole Manufacturers,* Wyandotte, Mich.

WILLIAM H. HAYWARD, President — EDWARD M. JOHNSON, Vice Pres. and Treas. — JOSEPH A. BRYANT, Vice President

ARNOLD, HOFFMAN & CO., Inc.

Established 1815

PROVIDENCE, R. I. — NEW YORK, N. Y.
BOSTON, MASS. — PHILADELPHIA, PA.
CHARLOTTE, N. C.

HEAVY CHEMICALS

Sole Agents for

BELLE ALKALI CO. of Belle, W. Va.

manufacturers of

LIQUID CHLORINE
CAUSTIC SODA

(Solid and Flaked)

See also CONSOLIDATED TEXTILE CATALOG

DYESTUFFS AND CHEMICALS

Joins United Chemical Sales Force in South

W. R. Smith, formerly with the Portsmouth Chemical & Dye Works, has joined the southern sales force of the United Chemical Products Corp. He will make his headquarters in Raleigh and will work the southern territory, which is in charge of W. T. Grant, of Charlotte.

More Flax Raising in Northern Wisconsin

ASHLAND, WIS.—What is believed to be the largest flax operation ever attempted in Northern Wisconsin was begun recently by the Northern Wisconsin Mortgage Loan Co., when three tractors, each with twin plows attached, began the plowing of one thousand acres of ground preparatory to the sowing of flax.

The tractors are all equipped with headlights and working lights and will be run 24 hours a day until the plowing, discing, harrowing, sowing and rolling of the fields, is completed. Two shifts of men will be used until the work is done and it is figured that it will take from 30 to 45 days to get the entire one thousand acres in.

The company expects, if it has an even break, to demonstrate that there is money to be made out of raising flax in Northern Wisconsin.

German Dye Exports Increase

Coal Tar Products Represented Larger Part of Total Dye Shipments in 1926 Than 1925

AN increase in the quantity of coal tar dyes exported from Germany in 1926, as compared with 1925, is shown in a report from Trade Commissioner William T. Daugherty, Berlin, to the U. S. Department of Commerce.

Germany's exports of animal, vegetable, coal-tar, and mineral colors amounted to 143,854 metric tons in 1926, of which 37,142 tons, or 26%, consisted of coal-tar dyes. Of the 1925 export of 138,681 tons, 34,418 tons, or 25%, were coal-tar dyes. Imports of all colors totaled 39,266 metric tons in 1926.

The exports of coal-tar dyes are enumerated in the accompanying table.

Principal Takers

China led as a market for aniline dyes (3,871 tons), indigo (8,654 tons), and indigo carmine (341 tons). British India was the leading market for alizarine dyes (1,269 tons) and also bought 2,188 tons of aniline dyes. Other aniline dye destinations were: Czechoslovakia, 1,847 tons; Russia, 1,728; and the United States, 706.

The United States was Germany's second market for alizarine dyes but purchased only 277 tons, followed by the Netherlands Indies, 154; Great Britain, 144; and the Netherlands, 114 tons.

Japan was Germany's second best market for indigo, purchasing 929 tons, followed by British India, 553 tons; Netherlands Indies, 497; the Netherlands, 247; and Czechoslovakia, 229 tons.

Other 1926 exports were: Lithopone, 15,969 metric tons, of which the United States received 1,343; umber earth, 14,324; gray zinc oxide, 12,699; zinc white, 10,743; and white chalk, 10,304.

It is interesting to note in the accompanying table that German coal tar dye exports in 1926 were only about one-third those of 1913, the last complete pre-war year.

GERMANY'S EXPORTS OF COAL-TAR DYES

Item	1913 *Metric tons*	1925 *Metric tons*	1926 *Metric tons*
Aniline dyes	64,288	17,365	21,168
Alizarine dyes	11,040	2,185	*3,001
Indigo	33,353	14,468	12,432
Indigo carmine	.....	400	541
	108,681	34,418	37,142

* Including 499 metric tons of red alizarine dyes.

Chemists of Middle West to Meet

Men of science in the Middle West will gather at the University of Chicago May 27 for a two-day regional meeting under the auspices of the Chicago Section of the American Chemical Society, of which Dr. Paul Nicholas Leech is chairman.

Universities, industries, and State services in Illinois, Wisconsin, Iowa, Missouri, Nebraska, Minnesota, and Indiana will send scores of chemists

Miscellaneous Chemicals

Aluminum Sulp. com.	1 40 — 1 45
Iron Free	2 00 — 2 05
Alum, Ammonia Lmp.	3¾— 3½
Potash, Lump	2¾— 3¼
Ammoniac, Sal. white gr., dom.	5½— 7
Bleach powder, per 100 lb. works	2 00 — 2 40
Blue Stone	5 — 5¼
Calcium Arsenate	7½— 8
Chlorine, Liq. Cylinders	5½— 9
Tanks	4 — ...
Copperas, ton	13 00 —19 00
Cream of Tartar	22½— 23
Epsom Salts, 100 lb.	1 25 — 1 90
Formaldehyde Spot	11½— 12
Glauber Salts, 100 lb.	90 — 1 15
Glycerine (C. P.) bbls.	26 — 26½
Cans	27½— 28
Yellow Crude	26 — 26½
Hydrosulphite Conc.	24 — 25
Lead—Brown acetate	13 — 13½
White (crystals)	14 — 14½
Lime, acetate, 100 lb.	3 50 — ...
Potassium—Bichromate	8¼— 8⅝
Chlorate crystals	8½— 9
Permangan. tech.	13½— 14
Sodium acetate	4½— 5
Bichromate	6½— 6¾
Bisulphite, 35%	1 50 — 1 75
Nitrite	8 — 9
Phosphate	3¾— 4½
Prussiate, yellow	12 — 12½
Sulphide, 60% fused.	3¾— 4
30% crystals	2¼— 2½
Tartar emetic, tech.	29 — 31½
Tin—Crystals	46½— 47
Bichloride, 50 deg.	19½— 19¾
Oxide, bbls.	70 — 72
Zinc Dust	9½— 10

Acids

Acetic, 28% per 100 lb.	3 37½— 3 62½
Citric crystals	43½— 44½
Formic, 90%	10½— 11
Lactic, 22%	6½— 7
Muriatic, 18 deg. per 100 lb. in tank cars.	85 — 95
Nitric, 36@42 deg. per 100 lb.	5 00 — 6 75
Oxalic	11¼— 12
Sulphuric, 66 deg. per ton in tank cars	15 00 —16 00
Tartaric (imported)	27½— 28

Alkalies

Ammonia, aqua, 26 deg.	2¾— 3¼
Borax, Crys. bbls.	4½— ...
Potash, carbonate, 80–85%	5½— 6
Caustic, 88–92%	7⅛— 7⅝
Soda Ash, 58% light	1 37½— 2 44
Contract, 100 lb.	1 32½— 1 57½
Bicarb. per 100 lbs.	1 90 — 2 25
Caustic, 76% per 100 lb.	3 10 — 3 90
Contract, 100 lb	3 00
Sal. 100 lb.	90 — 1 00

Natural Dyes and Tannins

Fustic: Crystals	18 — 22
Liquid, 51 deg.	9 — 10
Gambier, liquid	11½— 12
Hematine, crystals	14 — 18
Hypernic Ext.—51 deg.	11 — 15
Indigo—Madras	1 30 — ...
Logwood Extract, liq. 51 deg.	8 — 9
Crystals	14 — 18
Osage Orange, Extract, 51 deg.	7 — 7¼
Quercitron extract, 51 deg.	6 — 6½
Sumac. Ext. dom., ref., 51 deg.	6½— 7
Extract, stainless	10 — ...
Tannic Acid, tech.	35 — 40

Dyestuffs and Intermediaries

Alpha Napthylamine	35 — 37
Crude	60 — 65
Aniline Oil	15 — 15½
Salt	24 — 25
Beta Naphthol, sublimed	55 — 60
Technical	22 — 24
Dimethylaniline	32 — 34
Metaphenylene Diamine	90 — 95
Paranitraniline	52 — 53

Oils and Soaps

Caster Oil, No. 3	13½— 15
Olive Oil, denatured, gal.	1 65 — 1 75
Foots	9½— ...
Red Oil, lb.	9 — 10½
Stearic Acid, double pressed	11½— 12
Turkey Red Oil, 50%	10 — 12
Tapioca flour	3½— 5½

Adhesive and Sizing Materials

Albumen, blood domestic	45 — 60
Dextrine-Potato	8½— 9
Corn, bags 100 lb.	4 07 — 4 12
Do. bbls., 100 lb.	4 34 — 4 39
Gum, British, 100 lb.	4 37 — ...
Do. bbls.	4 64 — ...
Sago flour	3½— 4
Starch, corn, 100 lb.	3 32 — 3 42
Do. bbls.	3 59 — 3 69
Do. thin boiling, bags, 100 lb.	3 92 — 4 02
Do. bbls.	4 19 — 4 29
Potato	6½— 7½
Rice	9 — 9½
Wheat	6½— 8

Coal Tar Dyes

Direct Colors—

Black (H-acid)	28 — 35
Black Columbia FF.	50 — 60
Blue, 2 B.	24 — 32
Blue sky, ordinary	60 — 80
Blue, 2 GL.	2 00 — 2 50
Blue, 4 GL.	2 25 — ...
Blue Sky, FF.	95 — 1 50
Blue, Fast RL.	1 90 — ...
Blue, Solamine	2 00 — ...
Benzo Azurine	75 — 80
Brown, C.	40 — 60
Brown, M.	70 — 90
Brown, Congo G.	85 — ...
Brown, Congo R.	80 — ...
Green, B.	60 — 90
Green, G.	65 — 90
Orange, Congo	60 — ...
Orange, Fast S.	1 70 — ...
Red, Fast F.	80 — 90
Red, Congo	40 — 56
Benzo Purpurine, 4 B.	40 — 60
Benzo Purpurine 10 B.	1 25 — 1 50
Scarlet, 4 BA.	1 50 — ...
Scarlet, 4 BS.	2 10 — ...
Scarlet, 8 BS.	2 15 — ...
Scarlet, Diamine B.	1 65 — ...
Violet N.	1 10 — 1 20
Yellow chrysophenine	60 — 1 30
Yellow, Stillbene	90 — 95

Developing Colors—

Black, BH	40 — 60
Black Zambesi	... — 90
Bordeaux, Dev.	2 50 — ...
Orange, developed	2 50 — ...
Primuline	1 00 — 1 15
Red, Dev. 7 BL.	2 50 — ..
Scarlet, Dev.	2 50 — ...

Sulphur Colors—

Black	14 — 24
Blue, cadet	90 — 95
Blue, navy	50 — 60
Brown	20 — 60
Green	55 — 1 50
Green, olive	25 — 50
Yellow	45 — 50

Basic Colors—

Auramine	90 — 1 00
Bismark Brown	50 — 60
Chrysoidine	40 — 65
Fuschine crystals	1 50 — 1 75
Malachite green	1 50 — ...
Methylene blue	1 10 — 1 25
Methyl violet	80 — 1 15
Rhodamine B. extra cone	5 50 — 6 00
Safranine	1 45 — 1 60
Victoria Blue B.	3 10 — ...

Acid Colors—

Naphthol blue blk.	35 — 60
Napthlamine black 4 B.	50 — 55
Alizarine saphirol	2 75 — 4 00
Alkali blue	3 25 — 3 50
Indigotine	75 — 1 30
Induline (water soluable)	75 — 80
Soluble Blue	3 00 — 3 75
Sulphoneyanine	70 — 95
Sulphone Blue R.	60 — 95
Patent Blue A.	2 85 — ...
Rescorcin brown	80 — 90
Guinea green	1 00 — 2 20
Wool green S.	70 — 1 70
Orange II	24 — 30
Orange GG crys.	60 — ...
Acid Fuchsine	80 — 90
Azo eosine G.	65 — 82
Crocein scarlet	1 15 — 1 30
Fast red A.	50 — 65
Azo yellow	1 35 — 1 40
F. Light Yellow 2 G.	2 00 — ...
F. Light Yellow 3 G.	1 00 — 2 50
Naphthol, yellow	1 35 — 1 40

Chrome Colors—

Aliz. Black B.	2 00 — ...
Diamond Black PV.	70 — ...
Chrome Blue Black	40 — 50
Chrome Brown	60 — 1 25
Chrome Green	75 — 1 50
Chrome Yellow	45 — 1 10

Indigo—

Synthetic 20% paste.	14 — 14½

MILL CRAYONS

LOWELL CRAYON COMPANY

Lowell
Mass.

Original Manufacturers

PROMPT SERVICE
RIGHT PRICES

BONE DRY
HOSIERY FINISHING BOARDS
THAT WORK ABSOLUTELY SMOOTH

Jos. T. Pearson & Sons Co.
1825 E. Boston Ave., Philadelphia, Pa.

REG. U. S.
DECALSO
PATENT OFFICE

Water softeners for throwsters, scourers, bleachers, dyers and finishers

LIME & SODA Softeners
FILTERS & PURIFIERS

American Water Softener Co.
S. E. Cor. 4th and Lehigh Ave., Phila., Pa.

WM. BREEDON'S SON
MANUFACTURERS OF
SPRING KNITTING and TRICK NEEDLES
AND BURR BLADES OF ALL KINDS
AMSTERDAM, N. Y.

L. T. IVES CO.
Established 1874 Manufacturers of all Kinds of
Spring Knitting Needles
Slides, Sinkers, Jacks, Etc.
NEW BRUNSWICK, N. J.

EXTRACTORS
HARING & STEPHENS Co
PATERSON, N. J.

AND *NOW*
SYNTHETIC OLIVE OIL
MANUFACTURED AND SOLD BY US AS
"OLOVOLO"
Chemical Analysis Cannot Distinguish
It From Pure Commercial Olive Oil
Quality—Always Uniform. Price—Always Less.
Delivery—Over Any Period. Samples—Upon Request
BOYER, KIENLE COMPANY, Inc.,
135 Liberty Street - - - New York City

NOTTINGHAM CURD
TALLOW CHIP No. 2 and No. 3 Chip SOAP
POTASH FIG SOAPS
for Woolens and Worsteds made with
Red Oil Olive Oil
Amber Oil
Olive Foots
TEXTILE SOAPS
MADE IN PAWTUCKET, R.I.
J.O. DRAPER CO.
Palm Oil
Curd SOAP
Olive SOAP
Chips or Bars
Soap Powder
For Mill Floors
Established 1860. Incorporated 1905
LET US SUPPLY YOU

S. R. DAVID & COMPANY
INCORPORATED
Dyestuffs
252 Congress Street Boston, Mass.
Sole New England Agents for LACTAMINE and VIOLAMINE.
New England Agents for the FADE-OMETER,
Manufactured by Atlas Electric Devices Co.

ESTABLISHED 1882
WALTER F. SYKES & COMPANY
IMPORTERS OF
FRENCH ANILINE COLORS AND DYEWOOD EXTRACTS
8 Lispenard Street, NEW YORK
PHILADELPHIA United States Agents BOSTON
ST. DENIS DYESTUFF & CHEMICAL CO.
(Poirrier)
Works—St. Denis (Seine,) France Works—Besseges, France

ONYX OIL & CHEMICAL CO.
We cater to the wants of the Bleacher—Dyer—
Throwster—Printer and Finisher

Everything for Textile Printers
And for Bleachers, Dyers and Finishers
Engraving Machinery and Supplies
Chas. A. Johnson & Co., 25 Walker Street, New York City
Branch Office: 15 Pine Street, Providence, R. I.

W. J. WESTAWAY CO.
LIMITED
HAMILTON, CANADA
Textile Engineers
We design, supervise construction and completely equip mills for any textile process.
Textile and Knitting Mill Machinery
Hamilton Office:
THE WESTAWAY BLDG.,
Main and McNab Sts.
Demonstrating Department:
THE WESTAWAY BLDG.,
Main and McNab Sts.
Montreal Office:
M. L. C. Building

IDEAL WEATHER
FOR EVERY
TEXTILE PROCESS
Air Conditioning
of the
Better Class
Humidifying
Dehumidifying
Cooling—Heating
Ventilating
See also CONSOLIDATED TEXTILE CATALOG
The Cooling and Air Conditioning Corp.
31 Union Sq. W., New York City

Looms
The Standard for All Narrow Fabrics
FLETCHER WORKS
Formerly Schaum & Uhlinger
Philadelphia

V. E. MERTZ 151 Fifth Ave., New York
HUMIDIFYING
Ventilating — Summer Cooling — Winter Heating — Automatic Control
Aerophor Mertz System, Blower System, Spray Head System and others.
Aerophor Mertz System

Dyes and Chemicals—Continued

to report the results of research in many fields of chemical science.

Headquarters for the chemists will be at the Windermere Hotel, Hyde Park Boulevard and 57th Street. Registration will be conducted at the Kent Laboratory, where a general meeting will convene. Group sessions will be held in buildings of the university on the campus.

About 500 chemists are expected to participate. Many scientific papers will be read. Leading members of the American Chemical Society will deliver addresses at a banquet in honor of the Willard Gibbs Medallist.

Business News

R. J. Caldwell New York Office in New Location

The R. J. Caldwell Co., Inc., removed on May 1 from 15 Park Row, New York City, to its new location at 19 West 44th St., New York City.

Torsion Balance Chicago Office Moved

The Torsion Balance Co., New York, has moved its Chicago office to the Builders' Building, 228 N. La Salle St. The new office is more commodious and will be complete with sample and stock room.

Precision Machine Co. in New Home

The Precision Machine Co. is now located in its new home at 368 Milwaukee St., Milwaukee, Wis., where expanded facilities, space and equipment increase the company's productive capacity and enable it to render improved service.

Elected Vice-President of Peerless Machine Co.

E. W. Knapp, Bourse Building, Philadelphia, who has been identified with the yarn trade in that territory for many years, has been elected vice-president of Peerless Machine Co., Inc., Coral & E. Hagert Streets, Philadelphia, seaming machines for the full fashioned hosiery trade.

Scaife New York Office Moved

The New York office of Wm. B. Scaife & Sons Co., of Pittsburgh, Pa., has been moved from its location at 26 Cortlandt St., where it has been for 20 years. The new office is in the Architects Building at 101 Park Avenue. Metropolitan district sales of the company's various products are handled from this office by the manager, H. F. Raynolds.

To Represent National Marking Machine Co.

The National Marking Machine Co., Cincinnati, O., manufacturer of identification equipment and conveyors, announces that it has made arrangements with Cecil P. Hostetter to represent the company in the States of Georgia, Alabama, Mississippi, Louisiana, Florida, South Carolina and Tennessee. His headquarters will be Atlanta, care Hotel Winecoff.

Mr. Hostetter is well known in the South and will be in a position to give advice and service concerning the company's line of laundry identification and assorting room equipment.

Thos. Holroyd Liquidating Machinery Business

Thomas Holroyd, 1311 Orthodox St., Frankford, Phila., who has been engaged in the second hand textile machinery business for 18 years, is now liquidating his business. He plans to sail for Europe June 4, for a trip to England, returning in September.

L. H. Meyer's Southern Representative

H. L. McCall, No. 6 Cutter Bldg., Charlotte, N. C., has been appointed southern representative for L. H. Meyers, 2615 N. Third St., Philadelphia, manufacturers of Pigeon compensating yarn tensions, coners, porcelain roller guides and adjustable gate tension devices. Mr. McCall is well known throughout the southern territory.

To Represent Ganschow in Milwaukee

The William Ganschow Co. of Chicago and Peoria announces the appointment of Fred E. Holtz as representative in the Milwaukee territory. The division headquarters will be located at 1246-24th Ave., Milwaukee, Wis.

Mr. Holtz will be assisted by Oscar E. Rosche, who is a well known power transmission engineer in that section. Mr. Holtz has had a great deal of experience in the gearing field, having represented the Jones Foundry & Machine Co. in that territory for a number of years.

New Use for Tape

The Perfect Measuring Tape Co., 303 Fourth Ave. is presenting a product to the textile industry for which it claims economies and greater efficiency. This tape is designed for use in connection with merchandise in which it is rolled in the piece. The tape is marked every eighth of a yard, thus giving the correct yardage in the bolt of goods without extra measurement. The material can be cut wherever desired and the yardage mark gives an accurate measurement of the amount remaining. It is designed to eliminate claims for shortage and can be utilized to advantage in connection with inventories.

Anchor Post Fence Co to Build at Baltimore

The Anchor Post Fence Co., of New York and Cleveland, has acquired control of a site in Baltimore, for the erection of a new manufacturing plant. The site selected is in the eastern industrial section of Baltimore, having direct rail connection by means of the Canton Railroad, with both the Baltimore & Ohio and Pennsylvania roads. It is within a short distance of the new plant of the Bethlehem Steel Co. at Sparrows Point. It is the intention of the company to make this now plant their main eastern factory.

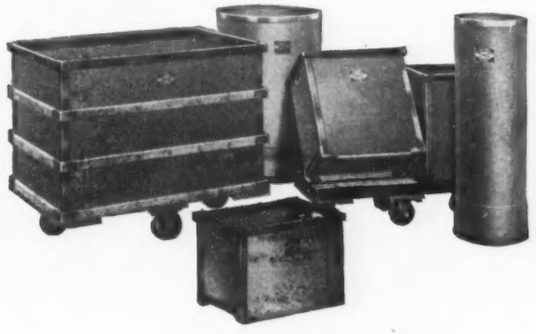
The company now operates plants at Cleveland, O., and Garwood, N. J.

The first unit to be erected will be a on-story steel and concrete manufacturing and storage building, 200 feet wide by 500 ft. in length. The building is to be equipped with an overhead traveling

Spaulding FIBRE for Economy & Service

DO you use unusual sizes or odd shapes of mill receptacles? Spaulding Service includes the making of special Fibre Trucks, Boxes, Cans, and Barrels. Ask us to quote on your special requirements.

The immense number of Spaulding fibre products includes parts and finished articles for use in the Electrical, Automotive, General Industrial, and Textile industries.



Write for catalog and quotations

Trade SPAULDING Fibre COMPANY Mark

SPAULDING FIBRE COMPANY, Inc.
Rochester, New Hampshire

Branch Offices:

Boston
Charlotte, N. C.
Cincinnati
Cleveland
Detroit
New York
Philadelphia
Tonawanda, N.Y.
Chicago

A view of the Avondale Mills, where hundreds of Diamond Fibre roving cans and trucks are in constant use.

Diamond State Fibre Quality is Apparent at a Glance

Quality which is unquestionably proven by the superior service these better industrial receptacles are rendering thousands of Manufacturers

A partial list of the Industries Served by Diamond Fibre Receptacles

Bakeries
Flour Mills
Dyes and Chemicals
Sugar
Textile
Paint
Explosives
Machinery
Paper
Fibre
Tobacco
Hospitals
Rope
Rubber
Automobiles
Meat Packing
Metal Specialties
Oil Cloth
Railroads
Breweries

REAL QUALITY cannot be concealed. This famous Diamond Fibre "family" of industrial receptacles—every one smooth-faced, light, husky and long wearing—reflect their built-in quality in each shining surface.

Textile plants by the hundreds, as well as manufacturers representing more than 50 different industries, have selected Diamond Fibre Receptacles for the better, easier handling and greater protection of their products during every phase of manufacture.

The records of long service and enduring quality that these receptacles have accomplished for such manufacturers, have been responsible for the origin of a new measuring stick of value in handling equipment—the original cost divided by the number of years which they will continue to do this better job.

This is the only way *you* should select the industrial receptacles to serve your plant needs. When you do, *you, too,* will select the Diamond Fibre "family".

The list of Diamond Fibre Receptacles includes roving cans, gill cans, bobbin boxes, trucks, waste hampers, mill boxes, doffing cars, mill baskets, barrels, trays, shipping boxes and sample cases.

DIAMOND STATE FIBRE COMPANY, *Bridgeport, Pennsylvania*
Offices in the principal cities and in Canada

Diamond Fibre

RECEPTACLES *for* INDUSTRY

crane, weaving looms, a continuous galvanizing unit and is to have every facility for the economical manufacture and handling of its products.

The Austin Co., of Cleveland, is the general contractors. Building operations will start in June, with the expectation of completion by the fall.

New G. E. Officials

At the meeting of the board of directors of the General Electric Co., April 29, at Bloomfield, N. J., where the board met following the practice of inspecting from time to time the different plants of the company, Clarence M. Woolley, chairman of the board of the American Radiator Co. was elected a member of the board of directors. Charles W. Appleton of the law department was elected a vice president in charge of general relations with public utilities.

Business Literature

THE KSG PROCESS; International Combustion Engineering Corp., New York.

This 12-page pamphlet is concerned with the KSG process for low-temperature carbonization of coal to convert low-grade fuels and mine wastes into valuable and commercial products. The plant erected in 1924 at the collieries of M. Stinnes, Essen, Germany, has been in commercial operation since that time carbonizing some 80 tons of coal per day, and this pamphlet contains the first published particulars of the results obtained during this time. A description of the plant is given, and there is included a detailed account of the products of carbonization obtained, the heating efficiency of retort reached, labor costs, etc. Numerous illustrations and charts help the reader obtain a clear conception of the purpose and operation of the KSG process.

TRAMRAIL ENGINEERS ARE MATERIAL MOVING SPECIALISTS; Cleveland Crane & Engineering Co., Wickliffe, O.

Headed by the caption, "Material in the making should *flow* through every manufacturing process," the inside pages of this folder contain illustrations showing how a variety of plants have linked moving up with the making by installing Cleveland tramrail systems. It is explained that through the use of elevators, drop sections, electric hoists, special carriers, and racks, the tramrail system has been adapted to the handling requirements of every industry, in many of which material is moved through several of the necessary operations without rehandling. Some of the advantages of overhead systems which make them an economical and practical solution for many of the conveying problems are included.

NEW OBROUND CONDULETS; Crouse-Hinds Co., Syracuse, N. Y.

Seventy-two types of Obround condulets are illustrated in this folder. Novel features of the condulet are enumerated as follows: the new wedge-nut fastener which holds the cover or wiring device; the ease of placing the covers on the condulets with the screw at either side of the condulet opening; the unobstructed cover opening which makes it easy to pull conductors, splice, and tape splices; and the clamp wire terminals on the back of all wiring devices. An illustration shows the manner in which gaskets, when used, are so attached to the cover as to always be in the proper place.

Dress Goods Mills Show Fabrics

Attractive Costumes Designed from Materials Furnished by Local Companies

PHILADELPHIA.

THE sixth annual Fashion Show, given by students of the class in costume design, of the Pennsylvania Museum and School of Industrial Art was held in the auditorium of the Manufacturers' Club, Philadelphia, April 28, displays being made in the afternoon and in the evening. Textile manufacturers were especially attracted by the novel and stylish costumes which the young ladies of the class had designed, made from materials donated by dress goods manufacturers. Such methods as this of creating a larger demand for various types of dress goods materials are receiving increasing attention each year from manufacturers and practically all of the leading concerns in Philadelphia were represented.

Mildred Holland, Fourth Year Student at Pennsylvania Museum and School of Industrial Art, Showing Ecru Wool Dress Designed and Made by Her from Fabric Donated by Dress Goods Manufacturers for their Sixth Annual Fashion Show

A wool dress made from goods manufactured by the Walther Mfg. Co., and designed by Elizabeth Clair received attention as did a green wool suit made from fabrics produced by this concern and designed by Janet Hersey. Walther Mfg. Co. was also represented by a blue coat and dress costume designed by Mildred Holland. Folwell Bro. & Co., Inc., fabrics were displayed in several costumes, one being made from wool crepe that was designed in an attractive manner by Katherine Engart. Fabric manufactured by the same company was shown to advantage in a white wool coat designed and made by Elizabeth Tomlin.

Continental Mills, Inc., were represented in four of the costumes displayed and worn by various members of the class, one being a sport coat, made from cloth manufactured by this company and attractively designed by Beatrice Harrington. A suit was also displayed by the same concern and made by Miss Harrington. A green coat designed and made by Margaret Peck from fabrics of this company also attracted interest and a tan wool coat made from materials donated by Continental Mills and made into a beautiful model by Betty Stang was also shown.

A yellow crepe wool and silk dress made from fabric furnished by Wm. F. Read & Sons Co., and designed by Janet Hershey was one of the most attractive models displayed and created comment as did an ecru wool dress designed and made by Mildred Holland from dress materials donated and manufactured by this concern. Shelbourne Mills were represented by a wool dress designed by Adele MacHenry, the attractively designed cloth being noticeable in this costume. Worumbo Co., the only manufacturer outside of Philadelphia displaying goods, was represented in a blue-green wool coat designed and made by Kathryn Stanley.

Banquet of Falco Cotton Club

Members of the Falco Cotton Club of the Farr Alpaca Co., Holyoke, Mass., and guests, held a banquet at the Long House Inn Tuesday evening, April 26, President James Partington presiding. T. L. Warburton, vice-president and founder of the organization, was toastmaster and presented the bowling prizes.

Short talks were given by R. W. Boys, on the activities of the club, and D. R. Green, on the flood conditions in the Mississippi Valley. Morton Burdick of Springfield, classed as one of the best speakers in Western Massachusetts, gave a very interesting lecture, his subject being "The Ideal Citizen."

The entertainment consisted of humorous songs and recitations by William Brown, Thomas Wood and Mr. Gagnon of Easthampton. Ralph Hood, John Stock, Leon Fisher and Oscar Washburn, members of the club, did their bit in keeping things lively.

Prizes for the bowling league were distributed to the following: High single men, first prize loving cup donated by the management of the Suffolk Alleys was won by Ralph Hood. Other prizes were won by Miss Claire Gosslin, Frank Lee, Leon Fisher, Jules St. John, James Shaw and Thomas Thompson. The committee in charge was: George Illingworth, John Stock and James Partington.

Oldest Wool House

Coates Bros., Philadelphia to Be Succeeded by Hughes & Co.

PHILADELPHIA.—Announcement has been made that Coates Bros., which is stated to be the oldest wool house in this country, is going out of business, being succeeded by a new corporation called Hughes & Co., Inc., that will carry on this long established wool business at the same address, 127 Market St. Coates Bros., was established in 1851 under the name of Coates & Brown, the concern being started by Benjamin Coates, Sr., and Walter Brown. At a later date George Morrison Coates became a member of the company which then was renamed Coates Bros., that has continued to be their trading name until the present. William M. Coates, present senior member, was admitted to the company in 1864 and later his sons, Benjamin and J. Lloyd Coates were admitted.

William M. Coates, who takes a prominent part in civic matters, being head of the Philadelphia Board of Trade and an officer of one of the largest public libraries in the city, has been active as senior member of Coates Bros., until the present and will continue to direct its activities until the affairs are entirely closed. Mr. Coates is 82 years of age and is to be found at his office every week day. The firm of Coates Bros., is not only one of the oldest, if not the oldest in this country, but the unusually long terms of service that have been rendered by their employes is the subject of much interest in the trade, setting a mark that is seldom equalled in any line of endeavor.

Long Terms of Service

William M. Coates, senior member, has been with the firm for 63 years. Oliver T. Nice, one of the most widely known wool men in this country until the time of his death last year, was with Coates Bros., for 60 years, being active until the time of his death. J. Lyndall Hughes, who has been elected president of the new company, Hughes & Co., Inc., successors to Coates Bros., has been in the employ of Coates Bros., for more than 41 years and Stanley R. Smith, has been identified with them for almost 20 years, the average for these four being one of the longest for uninterrupted service in the country.

When the business was started in 1851 it was located in the same building that they occupy today at 127 Market St. At that time Market St., was called High St., the name first given to it in Revolutionary war times, visitors to the Sesqui-Centennial Exposition last year remembering the reproduction of High St., as it appeared in colonial days, which gave an idea of what the street looked like when Coates Bros. was started. The concern has in its possession at present old letters written by various members of the firm on which the name of High St., appears as their address. They believe they are the oldest wool house in the United States.

COMMISSION & CONTRACT WORK

Silk, Cotton, Worsted, Artificial Silk, Linen, and Novelty Yarns, Twisting, Doubling, Reeling, Cops, Cones, Tubes, and Skeins, Winding in every form, single and multiple.

WINDING?

Telephone
Trenton, N. J., 4308

SCIENTIFIC TEXTILE CO.
Morrisville, Bucks Co., Pa.

CONTRACT SPINNING & KNITTING

Any grade of stock converted on woolen system to yarn on standard or super cones, sizes from 7 to 30 cut, single or plied. Any kind of yarn, including rayon converted to cloth on spring needles, in all widths, any gauge.

NOVELTY KNITTING CO., Cohoes, N. Y.

Position Wanted

MANAGER—SUPERINTENDENT

Top maker and spinner of Worsted yarns, all types, including mixture for fine men's wear, is open for engagement. Can insure maximum production of quality yarns. Supervision covers coal pile to merchandising. Wide, practical experience in all details.

Address Adv. 286, Textile World, 334 Fourth Ave., New York.

Dyer's Assistant

Young chemist thoroughly experienced on dyeing Pure Silk piece goods especially fast dyes. Also have years of laboratory work. Go anywhere.

Address Adv. 326, Textile World, 334 Fourth Ave., New York.

Situations Wanted

Manufacturers who are in need of superintendents or overseers for any department of mill work may learn of suitable men upon application by mail or telephone to C. T. DONLEVY, care Textile World, 65 Franklin Street, Boston, Mass.

ASST. SUPT. IN COTTON SPINNING OR WEAVING MILL. Position wanted by man 30 yrs. of age, American, married. Worked on 1¼" staple up to 50's yarn, 1⅝ Egyptian up to 120's yarn. Familiar with Whitin, H&B, American Machine Co., C&K and Whitin looms. Good recommendations.
O. B. 1203, Textile World, Boston, Mass.

ASSISTANT SUPERINTENDENT IN WOOLEN MILL. Position wanted by man 39 yrs. of age, American, single. Worked on fancy men's wear and dress goods. Familiar with all machinery in a weaving plant. Good recommendations.
O. B. 1413, Textile World, Boston, Mass.

OVERSEER DYEING IN WLN. OR WST. MILL. Position wanted by man 23 yrs. of age, American, single. Worked on loose wool, piece goods, yarn, cotton rayon silk and wool. Familiar with Hussong, Sprague, Klauder-Weldon and Franklin process machines. Good references.
O. B. 1415, Textile World, Boston, Mass.

OVERSEER FINISHING WOOLENS AND WORSTEDS. Position wanted by man 46 yrs. of age, English, married. Worked on all kinds of woolens, worsteds, union goods and pile fabrics. Familiar with all kinds wet and dry finishing machinery. Good references.
O. B. 1416, Textile World, Boston, Mass.

OVERSEER WEAVING IN WOOLEN OR WORSTED MILL. Position wanted by man 36 yrs. of age, American, single. Worked on woolens, worsteds plain and fancy, cassimeres or shoddy goods, also cotton collar cloths. Familiar with C&K fancy and automatic looms and Draper magazine looms. Good recommendations.
O. B. 1417, Textile World, Boston, Mass.

WASTE
CUSTOM SERVICE
DUSTING
PICKING
CARDING
GARNETTING
ROLL CARDING
EXPERT ATTENTION

Samples and Prices on Request

BOLGER BROTHERS
1139-51 East Chelten Avenue
Germantown, Philadelphia, Pa.

OVERSEER WOOLEN DYEING. Position wanted by man 34 years of age, American, married. Worked on woolens both stock and pieces. Good recommendations.
O. B. 1418, Textile World, Boston, Mass.

OVERSEER WLN. OR WST. FINISHING. Position wanted by man 40 yrs. of age, American, married. Worked on all kinds of woolen and worsted goods. Familiar with all kinds finishing machinery. Good recommendations.
O. B. 1419, Textile World, Boston, Mass.

MANAGER, OR SUPERINTENDENT OF WLN. OR WST. MILL. Position wanted by man 50 yrs. of age, American, married. Worked on all grades of fancy worsteds, piece dyes, cassimeres and overcoatings. Good recommendations.
O. B. 1183, Textile World, Boston, Mass.

AGENT OR SUPT. WLN. OR WST. MILL. Position wanted by man 37 years of age, American, single. Worked on fancy woolens, suitings both high and low grade, overcoatings, plaid backs, cloakings, worsteds, etc. Good recommendations.
O. B. 1212, Textile World, Boston, Mass.

DYER IN WOOLEN OR HOSIERY MILL. Position wanted by man 48 years of age, American, single. Worked on hosiery, silk, cotton, wool, rayon and celanese; wool, raw stock, skein piece goods. Familiar with all makes dyeing machinery. Good references.
O. B. 1240, Textile World, Boston, Mass.

ASSISTANT SUPERINTENDENT IN WOOLEN MILL. Position wanted by man 30 years of age, American, married. Worked on men's wear, suiting, topcoating, automobile cloth, flannels, suitings, and fancy double and twist coatings. Familiar with D&F, J&B, C&K, James Hunter and Parks & Woolson machines. Good recommendations.
O. B. 212, Textile World, Boston, Mass.

SECOND HAND IN FINISHING DEPARTMENT OR ASSISTANT DESIGNER. Position wanted by man 27 yrs. of age, American, married. Worked on fancy worsteds and woolens, also dress goods. Familiar with all makes finishing machinery. Good recommendations.
O. B. 334, Textile World, Boston, Mass.

OVERSEER DYEING OR SECOND HAND. Position wanted by man 28 yrs. of age, American, single. Worked on piece goods, wst. and mohair tops, silk and wst. yarns, silk and wool raw stock, and vigereux printing. Familiar with Klauder-Weldon and Franklin machines. Good recommendations.
O. B. 1398, Textile World, Boston, Mass.

SUPERINTENDENT COTTON MILL OR OVERSEER CARDING. Position wanted by man 42 yrs. of age, American, married. Worked on fancy shirtings, muslins, lawns, sateens, etc., cotton and rayon. Familiar with all makes carding and spinning machines. Good recommendations.
O. B. 1399, Textile World, Boston, Mass.

OVERSEER MENDING AND BURLING. Position wanted by man 48 yrs. of age, English, married. Worked on ladies' and men's wear, woolen and fancy worsteds. Good references.
O. B. 1401, Textile World, Boston, Mass.

Constructive Optimism

(*Continued from page 67*)

merchandise at a certain time of the year.

Was not the vogue for furs the result of skilful propaganda by the fur people? There is no doubt that furs have interfered most disastrously with the cloak and suit trade. It is now reported that the character of furs which have been sold within the last few years is beginning to be recognized by the consumer and there is apparently a reaction against them. Is the woolen trade prepared to take advantages of this change, and will they do anything to foster the change toward woolen cloaks and suits? It would seem as though there were an opportunity here for a general line of publicity which would be favorable to woolen products.

Advertising to the Consumer

A good deal is being said about the desirability of advertising woolen products to the consumer. Certain prominent factors have embarked upon a campaign of consumer publicity. Are they going to get their money's worth out of it? As long as there is not a species of propaganda designed to continue the demand for a particular cloth or type of fabric, it would seem as though advertising to the consumer was not going to result in a hundred per cent benefit to the advertiser. There are ways in which a continuance of demand can be developed. As an illustration: If catalogue houses determine upon a particular fabric out of which models are made and advertised in their publications, thousands of pieces can be distributed as a result of the continuing demand for this specific model. The merchandise in these books is pushed for at least six months and their wide distribution means at least a consumption that the majority appreciate.

Is it not a peculiar thing that the majority of wool manufacturers should complain about their inability to make a profit on merchandise they produce when the cutter in the great majority of instances operates on a very safe margin of profit and with comparatively few exceptions makes money. I have in mind a model dress made from goods costing $2.00 a yard. On size 16 this garment can be made from 1⅝ yards. With the trimming, silk, etc., it can be produced for less than $5.00 a garment. I know because I have had it made. Dresses no better than this retail from $15.00 to $18.00. Does this not demonstrate the fact that the fabric manufacturer, if he exercises a sufficient degree of determination, can secure a profitable price for his merchandise? His customer has a margin on which he can operate sufficient to absorb what may be the difference between a loss and a profit to the mills. In other words, what we need in the wool goods selling markets is an accession of backbone.

Ask Me Another?

Cross words puzzles have been succeeded by the family game called "Ask Me Another?" I have a series of questions which I am going to ask the trade but the game differs a little from the ordinary procedure, because I am not going to give the answers. Some of them are very apparent and others may cause the trade to do some thinking. At any rate, here they are:

1. What is the meaning of cooperation?
2. What branches of the textile industry have selected a leader out side their own ranks?
3. How many other industries know as little about distribution as the woolen industry?
4. In what other industry is a contract not a contract?
5. What other industries give big rebates, long datings and special terms?
6. What other industries base their selling prices on 100% production when they can run their plants only 65%?
7. What other manufacturing industry loses money when their customers make good profits?
8. What other industry accepts orders at a loss, knowingly?
9. What other industry besides the textile trade has suffered from overproduction without endeavoring to apply a remedy?
10. What branch of the textile industry is developing new uses for its product?
11. Does advertising pay in other industries? Why?
12. What is the textile industry doing in the matter of research to help their situation
13. With the exception of the American Woolen Company, how many selling houses in the woolen trade have done away with blanket orders?
14. How many mills and selling agents refuse to give cuts?
15. What large textile concern has increased their business materially by skilful publicity to their trade who pay the concern for advertising their own product?
16. What radical changes have certain cotton goods houses made in the scheme of distribution?
17. What changes in the relationship of mill to selling house have been made in the cotton goods field?
18. Outside of raw silk, what branch of the textile industry has radically changed its selling terms?
19. What certain method can be used by which mills can put goods in work months ahead of consumption regardless of style trend?
20. Of what value would it be for mills to know conclusively style tendencies?
21. How much over $1,000,000,000 is invested in American textile mills today? (See front cover TEXTILE WORLD, April 23.)
22. Would several large selling organizations be beneficial?
23. What celebrated doctor said, "Every day in every way I am getting better and better."?
24. What is a good liniment for a weak backbone?

***Kubar Mfg. Co.**, Davidson, N. C., recently organized in Charlotte, has leased the building formerly known as the Linden Mill, and will soon start the manufacture of asbestos textiles there. The building is owned by the Davidson Cotton Mills.

New Smith-Hogg Prices

Smith Hogg & Co. have made prices as follows as of April 30. Delivery dates are from May to September:

Red Seal Zephyrs	32 inch	20¢
York Seersucker	32 inch	20¢
York Dress Gingham	27 inch	14¢
Balsam Chambray	32 inch	13½¢
Berwick Chambray	32 inch	14½¢
Yomac Gingham	32 inch	17¢
Hipo Fine Cloth	32 inch	22½¢
Kroy Krinkle	26 inch	17½¢
Clothing Seersucker	28 inch	18½¢
Clothing Seersucker	32 inch	22¢
York Golden Cloth	32 inch	22½¢
Criterion Chambray	30 inch	20¢
Holanda York	28 inch	23½¢
Holanda York	32 inch	25½¢
Elanette	32 inch	22½¢
York No. 10 Flannel	28 inch	25¢
York No. 10 Flannel	32 inch	28½¢
Lemona Flannel	28 inch	28½¢
Eden Flannel	32 inch	22½¢
Everett Classics	26 inch	12¢
Everett Classics	32 inch	14¢
Everett S C Shirting	28 inch	12¢
Kynvet Shirting	28 inch	11¢
Silver Key Chambray	32 ins	14½¢
Sunbrook Cloth (Rayon)	34½ inch	67½¢
Cleane (Rayon)	32 inch	67½¢
Evaheen (Rayon)	32 inch	62½¢
Chevrene (Rayon)	32 inch	67½¢

Staple Cottons Soaring

(*Continued from page 129*)

for water-damaged cotton that may be artificially dried and the fiber damaged by excessive heat. Water-soaked cotton and perished fiber is also something to be guarded against.

The Egyptian market has gone much farther in discounting the effect of a restricted supply of long staple cottons than has the domestic market, the advance in Sak. futures during the last two weeks ranging from 400 to 500 points, with new crop options the highest. The advance in the Upper options has been appoximately 250 points for the same period on both new and old crop futures. The advance was most radical on Tuesday and Wednesday of this week and was stimulated by hedge buying to cover a probable advance in premiums on new crops domestic extra staples, the hedge being completed by sales of American futures on the New York and Liverpool exchanges. The advance for the week in May Sak. at $31.00 is 320 points, and that in November Sak. at $32.28 is 320 points. June Uppers at $21.85 is up 155 points, and the October Upper option at $22.78 is up 148 points for the week. The advance in prompt shipments is proportional to that in futures and there has been considerable buying of high grade Sak by domestic mills around 40c.

Current Quotations

Average prices for May-June shipment of middling and strict middling hard western cotton (Government lengths) are as follows:

	Middling	St. Middling
1 1/16 in.	19 to20c.	20 to21c.
1 1/16 in. to 1⅛ in.	19½to20½c.	20½to21½c.
1 ⅛ in.	20½to21½c.	23 to23c.
1 3/16 in.	23½to24½c.	25 to26c.
1 ¼ in.	29 to30c.	32 to34c.

Basis on N. Y. July, 15.87c.

John Malloch & Co., Boston, quote Egyptian cotton, c. i. f. Boston for May-June shipment as follows: Medium Sakellarides 30⅞c, up 3¼c. Medium Uppers, 24⅜c, up 1½c. from April 27. They report closing prices May 4 on the Alexandria exchange as follows: June Uppers $21.85, up $1.55. May Sak. $31.00, up $3.20 from April 27.

Carded Yarn Group Formed

Institute Head Names Committees and Plans New York Meeting

CHARLOTTE, N. C.—Following formation of the carded yarn spinners' group of The Cotton-Textile Institute at a meeting here on May 4, Walker D. Hines, president of the Institute released the following statement:

"The meeting that we had this morning was the outgrowth of the discussion which took place when I was in Charlotte two months ago and has as its object the formation of a carded yarn group within the institute.

"The sentiments of the meeting were unanimous that the group should be formed and necessary action to that end was taken.

"On account of the fact that there is a number of northern mills also engaged in the production of carded yarns, it will be necessary to have a similar meeting in New York at an early date and it is anticipated that immediately after the New York meeting of the northern mills, group organization will be completed.

"It was sensed at the meeting that it would be a convenience to divide the group into three sections: Soft yarns; hard single and ply yarns, including 18s and coarser; and hard single and ply yarns, 20s and finer.

"Under the policy of the institute it is necessary to have a group committee appointed by the president, but, as explained, it is my policy to make appointments in accordance with recommendations of group meeting.

"The group accordingly recommended and I appointed the following members for the three sections of the group, as follows:

"Section A—Clifford J. Swift, Sidney D. Cooper, R. C. Moore.

"Section B—A. M. Fairley, Laurinburg, N. C.; C. A. Ensign, Forsythe, Ga.; J. F. Crigler, Greenville, S. C.

"Section C—J. A. Mandeville, Carrollton, Ga.; M. L. Cannon, Charlotte; J. A. Long, Roxboro, N. C.

"At the New York meeting, there will be additions to these committees and out of their full membership six men will be selected for the advisory committee for the group as a whole.

"I announced that, in accordance with the power invested in me, B. B. Gossett would be chairman of the advisory committee, giving that committee a total membership of seven.

"It is anticipated that, as soon as the committee is organized after the New York meeting, it will begin functioning to deal with the various problems confronting the carded yarn spinners, handling them along lines consistent with policy of institute.

"These matters will include adequate statistics and prosecution of careful inquiry into the course of production. Matters relating to the methods of selling also will receive consideration.

"The meeting showed a great deal of interest in the subject and gave emphatic assurance of the support of the organization formed."

The TEXTILE CLEARING HOUSE

Business Opportunities

Business Opportunities

James H. Hurley and E. Tudor Gross, Auctioneers

Experts in Selling Manufacturing Property at Auction

Approximately 1100 Auction Sales have been conducted under our auspices. Our corps of assistants includes persons experienced in the various details of assembling the facts and "broadcasting" them to the utmost advantage.

G. L. & H. J. GROSS

170 Westminster St., Providence, R. I.

WEAVING YARNS WANTED

Cotton Yarn Salesman with established trade in Philadelphia and vicinity, can handle to advantage an account for mill desiring to sell direct high grade weaving yarns, combed or carded.

Address Adv. 332, Textile World, 828 Drexel Bldg., Phila., Pa.

Wanted

Thread Winding

We would like to connect with a thread winding concern, who can dye and wind, or just wind, cotton and mercerize on 1200 Yd., and 2400 Yd. tubes.

Address Adv. 322, Textile World, 334 Fourth Ave., New York.

English spoken, native Italian, located in Genoa, Italy, desires to represent manufacturer of ladies' high grade silk hosiery.

Address Adv. 319, Textile World, 334 Fourth Ave., New York.

SURPLUS YARNS

We purchase yarns of all kinds. Large and small lots. Send samples, state price and quantity.

SCIENTIFIC TEXTILE CO., Morrisville, Pa.

Men Wanted

Men Wanted

SALESMAN WANTED

to take on a good side line on commission. Sells easily to all kinds of textile mills.

Address Adv. 269, Textile World, 334 Fourth Ave., New York.

Printing Superintendent

Wanted practical man to take charge of piece-goods printing and piece-dyeing plant. Small plant in South. Must be practical dyer and understand actual operation of machinery. Write age, if married, complete history of mill experience, name of each mill worked and actual work done, salary expected to start.

Address Adv. 330, Textile World 334 Fourth Ave., New York

Wanted

Three fixers for Scott & Williams reverse plaiting machines, wanted by large, well established mill in Tennessee.

Address Adv. 328, Textile World, 334 Fourth Ave., New York

WANTED

Knitting machine fixer, familiar with Banner knitting machine. State experience.

Address Adv. 329, Textile World 334 Fourth Ave., New York

WANTED

Boss weaver who understands thoroughly German wire plush looms.

Address Adv. 324, Textile World, 334 Fourth Ave., New York.